NAB CONVENTION ISSUE

With President Roosevelt's Message and Special Reference Features

BROADCASTING

Broadcast Advertising

Vol. 11 • No. 1

WASHINGTON, D. C.
JULY 1, 1936

Foreign
$4.00 the Year

$3.00 the Year
15c the Copy

Published Semi-Monthly, 25th issue (Yearbook Number) Published in February

JOHN CRERAR LIBRARY
JUL 2 1936
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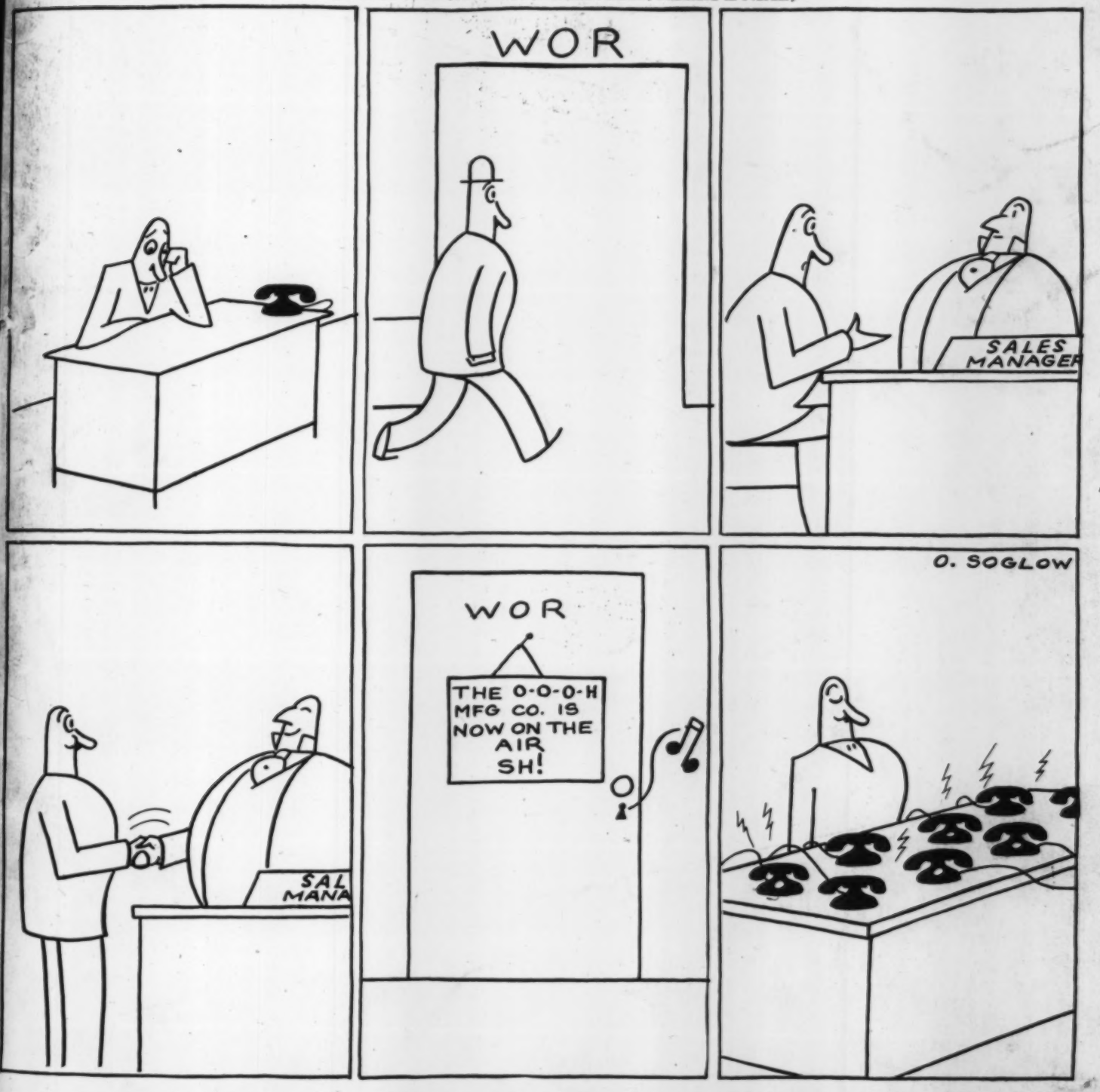
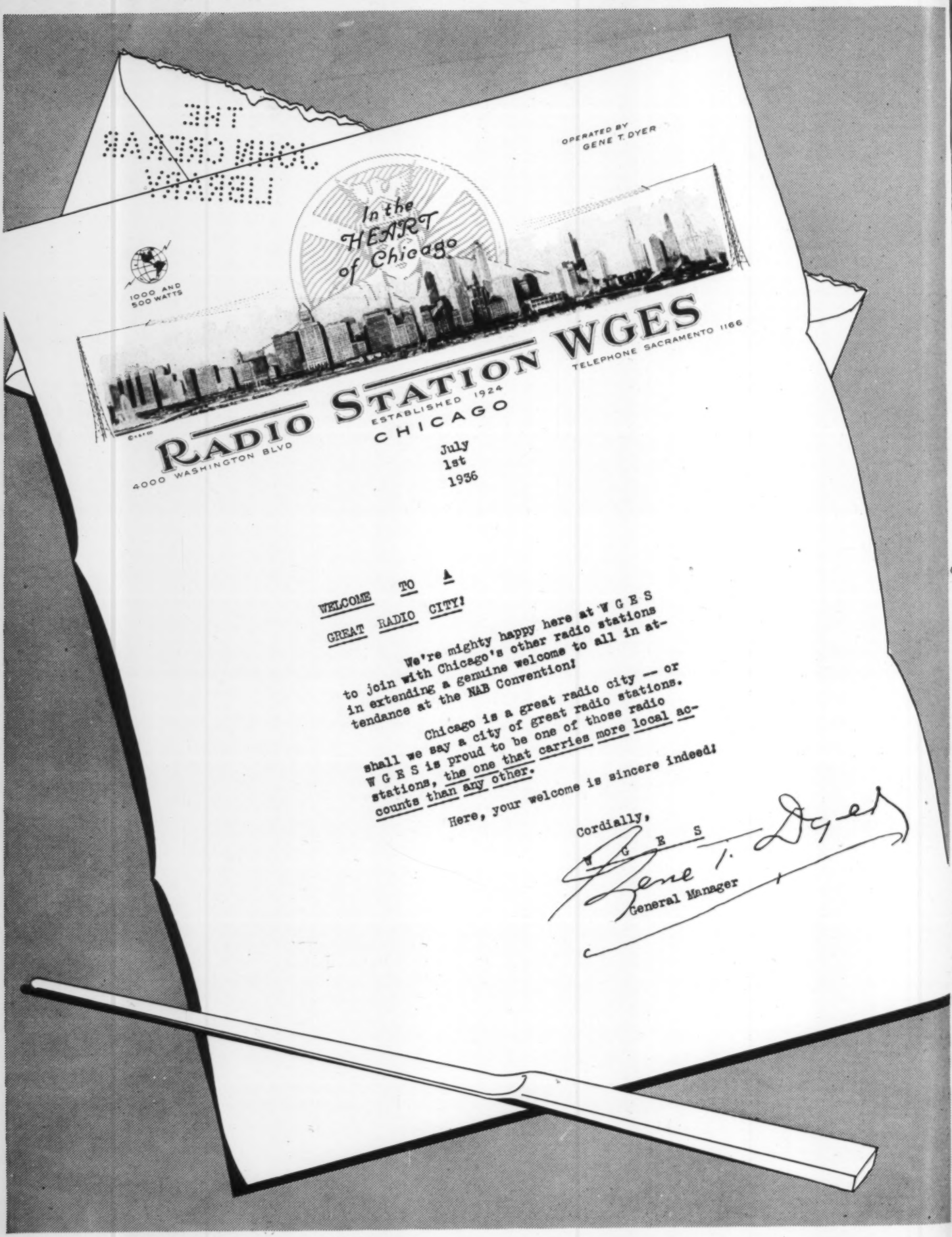



OPERATED BY
GENE T. DYER
In the
HEART
of Chicago
1000 AND
500 WATTS
RADIO STATION WGES
ESTABLISHED 1924
CHICAGO
TELEPHONE SACRAMENTO 1166
4000 WASHINGTON BLVD
July
1st
1936
WELCOME TO A
GREAT RADIO CITY!
We're mighty happy here at W G E S
to join with Chicago's other radio stations
in extending a genuine welcome to all in at-
tendance at the NAB Convention!
Chicago is a great radio city — or
shall we say a city of great radio stations.
W G E S is proud to be one of those radio
stations, the one that carries more local ac-
counts than any other.
Here, your welcome is sincere indeed!
Cordially,
W G E S
Gene T. Dyer
General Manager

This Way

for THESAURUS

"the Convention within a Convention"

PRESENTING

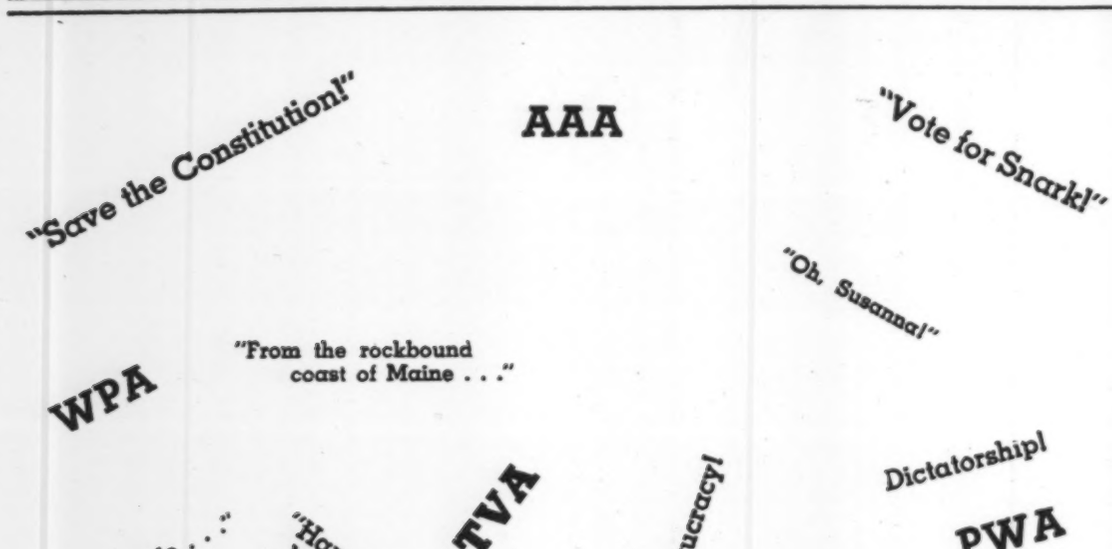
- NEW ARTISTS
- NEW FEATURES
- NEW SPECIALTIES

A Bigger and More Salable Thesaurus

NBC THESAURUS Exhibit

Suite 505 — HOTEL STEVENS

615954
L659.05
328 6A5
13781



ELECTION YEAR

It comes again . . . like a high fever . . . to sweep the country and bestir the dullest citizen.

In a blaze of brass bands, oratory, slogans and ballyhoo, it casts a spell over the land more gripping than any stage show or all-star radio program can achieve . . . Of course you will broadcast the campaign speeches. But these won't bring to your audience the news, the color, the excitement and the thrill of the vast spectacle now unfolding from coast to coast.

Transradio will furnish that—in greater measure than was ever offered before—during the big months just ahead.

By leased wire, wireless, teletype or telegraph, TRANSRADIO PRESS SERVICE offers whatever type of news service best suits your needs and your budget—news that is bright, fast, accurate . . . By overnight airmail, TRANSRADIO NEWS FEATURES offers (once, twice or thrice weekly) a news-commentator program, "The Political Promenade," vividly reviewing and interpreting the 1936 election battle.

Transradio Press Service

342 Madison Ave. New York City

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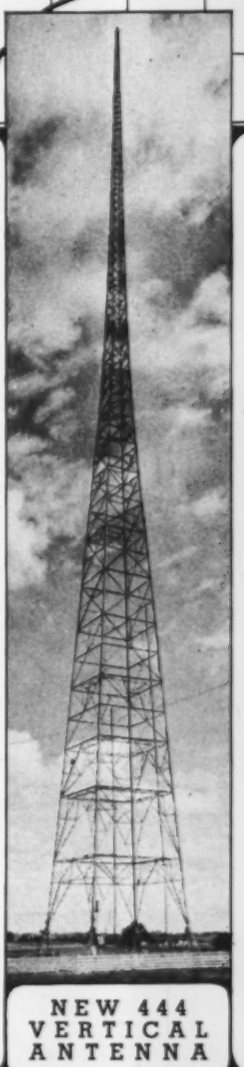
UP your sales with those of KLZ

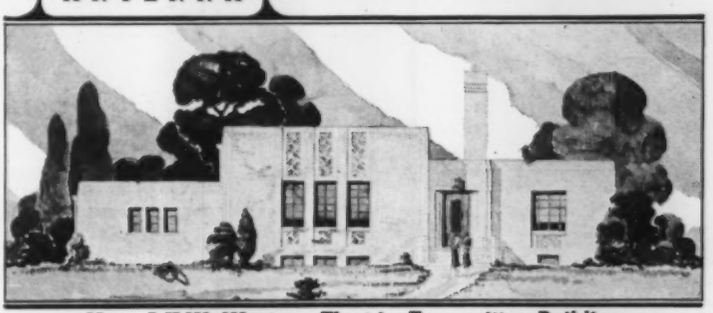


Ten crowded months have changed not only KLZ but the entire radio picture in the Denver-Rocky Mountain Area, changed station prestige—audience popularity—results—everything.

Consider these facts—Since Aug. 1, 1935 (when KLZ was placed under allied management with WKY, Oklahoma City), local program production expenditures are UP 382%. Number full time station employees UP 116%. Audience mail response (to Station only) UP 117%. Local sales UP (increase entirely programs) 31%.

Enlarged studios and offices (that must soon make way for an entirely new layout), new vertical Blaw-Knox Antenna, 444 feet tall, a new 5 K.W. transmitter housed in a modern building—are a few of the tangibles that are evidence of the new Denver situation.

The intangible but important point to sponsors is that KLZ's popularity is mounting by leaps and bounds, that sound promotion is focusing the buying EARS of the Denver area upon this station and sponsors' sales are going UP with those of this, the Pioneer Radio Station of the West.



New 5 K.W. Western Electric Transmitter Building

KLZ CBS AFFILIATE **Denver**

Represented nationally by E. Katz, Special Advertising Agency

Published semi-monthly, 25th issue (Year Book Number) published in February by BROADCASTING PUBLICATIONS, INC., 870 National Press Building, Washington, D. C. Entered as second class matter March 14, 1933, at the Post Office at Washington, D. C., under act of March 3, 1879.

50 WATTS "YOUR HOME STATION" 1200 KILOCYCLES

STUDIO AND TRANSMITTER IN **CKNX** THE RADIO & ELECTRIC SHOP

W. T. CRUICKSHANK, MANAGER

WINGHAM,
ONTARIO

June 6th, 1936.

A LETTER..

Sales Research Dept.,
Columbia Broadcasting System,
485 Madison Avenue,
New York City.

Gentlemen:

We are mightily interested in your three "Best Non-Fiction" books of radio, relative to summer time sales, and respectively titled "Radio in 1936", "Radio Listening in Automobiles", and "A Summary of Summer-1936 Radio Facts".

The writer has long admired the CBS policy of extending the courtesy of results of its sales research work to the out-lying network and independent stations. It is no wonder at all that CBS has always enjoyed in such goodly measure the respect and good-will of most station executives.

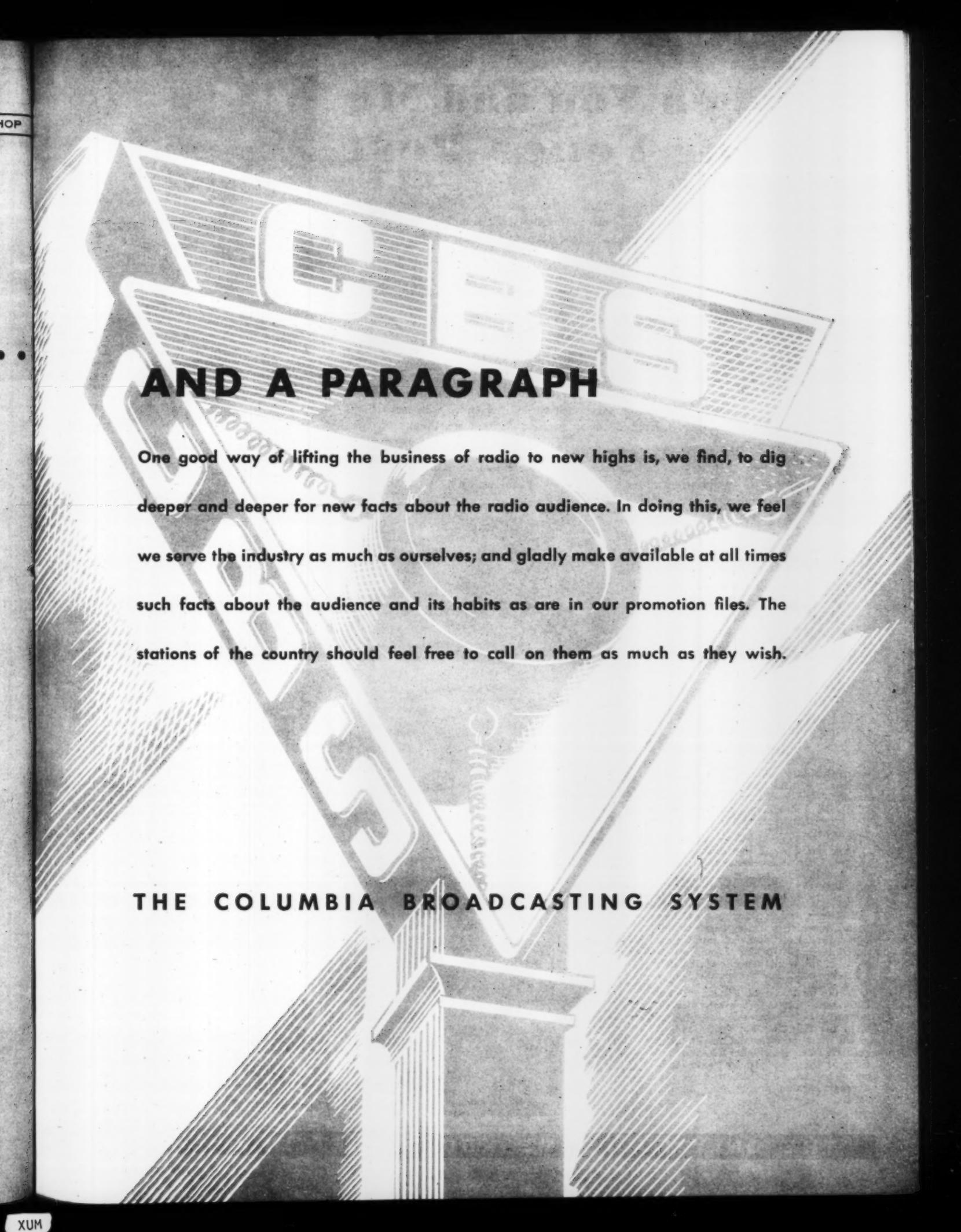
May we express our deep appreciation of this service, in advance?

Cordially,

RADIO STATION CKNX

B. Howard Bedford

B. Howard Bedford
Commercial Director



AND A PARAGRAPH

One good way of lifting the business of radio to new highs is, we find, to dig deeper and deeper for new facts about the radio audience. In doing this, we feel we serve the industry as much as ourselves; and gladly make available at all times such facts about the audience and its habits as are in our promotion files. The stations of the country should feel free to call on them as much as they wish.

THE COLUMBIA BROADCASTING SYSTEM

Between You and Me and the Fence Post

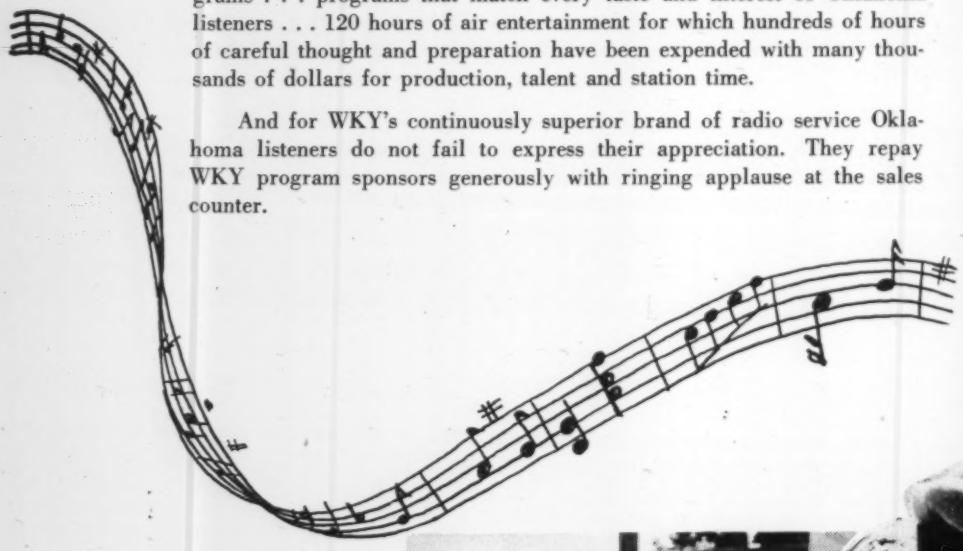
IT'S no state secret that WKY is the most listened-to station in Oklahoma. Even fence posts are getting the WKY listening habit . . . and that makes it just about unanimous. (See story below of the fence post that "listens" to WKY.)

To find the reason for WKY's top preference with Oklahoma listeners you need only to look over WKY's program schedule.

Programs are what people listen to . . . and WKY has the ones the majority of Oklahoma listeners prefer.

Each week WKY airs 120 solid hours of local and network programs . . . programs that match every taste and interest of Oklahoma listeners . . . 120 hours of air entertainment for which hundreds of hours of careful thought and preparation have been expended with many thousands of dollars for production, talent and station time.

And for WKY's continuously superior brand of radio service Oklahoma listeners do not fail to express their appreciation. They repay WKY program sponsors generously with ringing applause at the sales counter.



Left: Dean Riggs, discoverer of the "Singing Post" in Cushing, Oklahoma, listens to a WKY program through the small opening at the base of the post.

Left Below: "It's true!" says Joe Bernard of WKY who drove to Cushing to verify the fantastic reports of a "fence post that sings." Photos by Cordell Studios, Cushing, Okla.

OKLAHOMA'S "SINGING POST" THAT PICKS UP WKY PROGRAMS

• In Cushing, Oklahoma, 74 miles northeast of Oklahoma City, a very unusual fence post stands in the yard of O. D. Pidcock. It "listens" continuously and exclusively to WKY programs.

This strange and mysterious radio receiver has become a center of attraction in this town of 9,301. Curious listeners have worn the grass thin around its base.

The iron post is attached to others by wires which probably serve as antennae and the volume of sound produced seems to depend upon the velocity of the wind, being loudest when a strong wind blows from the South.

While instances of fence posts, lamp posts and other objects picking up radio broadcasts are not uncommon, the "Singing Post" of Cushing is the first phenomenon of its kind ever reported in Oklahoma. Explanations of these oddities by radio engineers, however, continue to leave the average layman pretty much in the dark.

WKY

OKLAHOMA CITY

Affiliated with the Daily Oklahoman the Times and the Farmer-Stockman

Representative · E. Katz Special Adv. Agency

THE ONLY FULL-TIME NBC OUTLET IN OKLAHOMA

INVITATION

to

BROADCASTERS

You are cordially invited — during the N. A. B. Convention in Chicago—to visit ASSOCIATED and hear the finest, most complete, most flexible and most *saleable*

TRANSCRIPTION LIBRARY

ever made available to radio stations and advertisers. Complete audition facilities—at your convenience and in a comfortable setting—will be maintained throughout the convention in

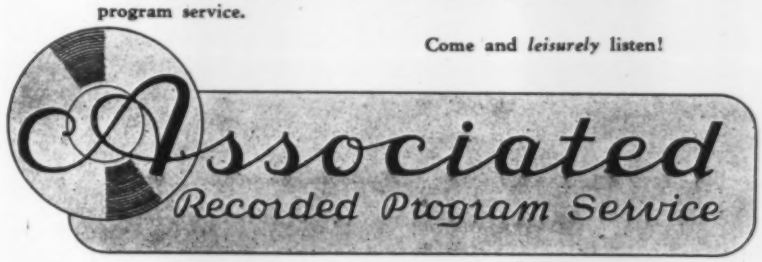
SUITE 2104-5-6-7

HOTEL STEVENS

CHICAGO

M. E. Tompkins, Loren L. Watson and J. M. Hayes, executives of Associated, will be in attendance to welcome you and demonstrate this truly different and distinguished recorded program service.

Come and *leisurely* listen!



produced by ASSOCIATED MUSIC PUBLISHERS, Inc.
25 West 45th St. New York City

US RED RIVER GUYS IS BUYING HEAVY!

Maybe you don't realize it, but this Red River Valley [the western part of Minnesota and the eastern part of North Dakota] is one of the most prosperous sections in the nation.

F'rinstance: Minnesota's new car sales for the first quarter were plus 27% over 1935 [national average was plus 22%] . . . . North Dakota's sales on household refrigerators are up 34%, while the average for West North Central is up only 8%.

Minnesota's farm income is up 12%—North Dakota's up 43%. The national average is a mere plus 7% . . . . Our heavy construction in N. D. is up 271% while the national average is only plus 96%.

Which leads us to believe that we're a pretty durned good medium for manufacturers who want to sell their products.

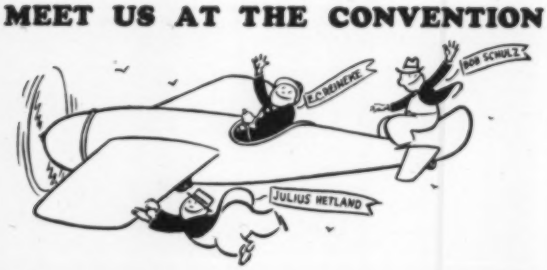
Lets talk it over!

WDAY, INC.

N. B. C.

FARGO, N. D.

MEET US AT THE CONVENTION



FREE, JOHNS & FIELD, INC.
NATIONAL REPRESENTATIVES

950 KILOCYCLES
5000 WATTS DAY
1000 WATTS NIGHT

Left to Right, ten Reasons for

BEST PROGRAMS ON THE AIR • • DAWN TO MIDNIGHT

ARTHUR B. CHURCH, President—Pioneer broadcaster and outstanding radio station manager and showman. Hobby: "Educational Entertainment."

TED MALONE—for years KMBC Program Director—now in New York broadcasting "Between the Bookends" on CBS Network; and producing "Phenomenon Electrifying History" on transcription.

FRAN HEYSER, Production Director—Versatile actor, announcer and ace producer of stage and radio plays.

LARRY SHERWOOD, Public Events Director and Special Features Announcer—KMBC and CBS listeners like his dynamic delivery.

"JIMMIE" PATT—Even John at WGAR and Ralph at WJR take off their hats to their younger brother when it comes to successfully threading the maze of program traffic problems—KMBC Traffic Manager.

ERLE H. SMITH, KMBC News Editor, war aviator, veteran editor, publicist and fiction writer—and KMBC Newscaster voice.

GOMER COOL, writer "Red Horse Ranch" transcription program—featuring Western drama and music by KMBC's nationally famous "Texas Rangers" group.

EVERETT KEMP, "Uncle Ezra Butternut"—in Happy Hollow since 1929, and writer of Happy Hollow feature on Coast to Coast Columbia Network.

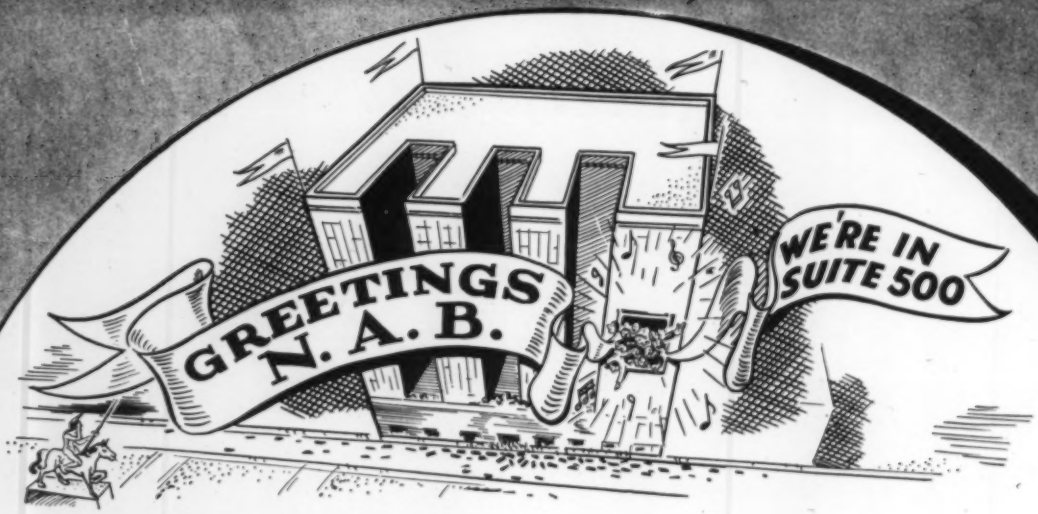
PHIL EVANS, voice of the KMBC "Good Morning" Farm Program, and farm market newscaster.

KENNETH KRAHL, Studio Director—whose technical supervision of KMBC programs has been a major factor in their consistent excellence.

One of America's first stations to specialize in quality of transmission as well as quality of programs, KMBC is today modernizing its studios with the latest acoustical developments by Johns-Manville • • • This will enable the new 5,000-watt Western Electric wide-range high fidelity transmitter installation to radiate as nearly perfect as now possible the outstanding program material for which KMBC has become nationally famous.

KMBC of KANSAS CITY

★ SERVING OVER 200 *Leading* RADIO STATIONS ★



LISTEN TO THE REST— THEN LISTEN TO THE BEST!

BIG DOIN'S in Suite 500 of the Stevens Hotel . . . facilities for you to listen "in comfort" to the STANDARD LIBRARY SERVICE and other STANDARD transcription features . . . Many new commercial angles, and lots of good news . . . f'rinstance: NO MORE TRANSCRIPTION COPYRIGHT FEES . . . and an INCREASE of Library Continuity Programs to TWELVE HOURS Weekly . . . and psst! . . . a real "Surprise Package" . . . come and get it!

★

★ THE KING'S MEN
★ THE LAST NIGHTER
★ SUPER-SOUND EFFECTS
★ STANDARD PROGRAM LIBRARY

★ OSCAR and ELMER
★ ONCE UPON A TIME
★ SONS OF THE PIONEERS
★ KAY KYSER'S ORCHESTRA

★ CUSTOM-BUILT FEATURES

STANDARD RADIO INC

6404 Hollywood Blvd., Hollywood, Calif. 180 North Michigan Avenue, Chicago

NEW YORK • BOSTON • ATLANTA • SAN ANTONIO • TORONTO • LONDON

FOUR LONG YEARS

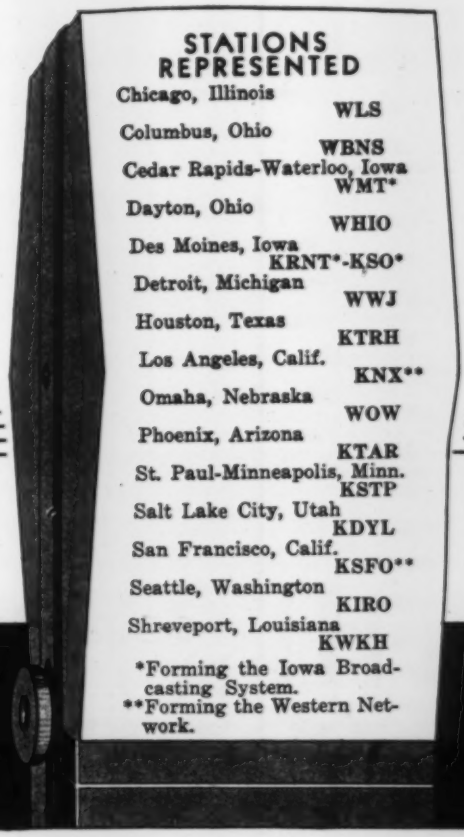
Results: Business Exceeds National Average by Over 300%

You in Convention assembled look back with pride to accomplishment — forward with plans. Keeping pace with you has been and will be our objective.

Four years ago, when the John Blair Organization was formed, the idea of national "spot" was not a generally accepted one. Its development into real volume has been coincident with the evolution of national representation. These have been hard, pioneering years for us—earnings have been plowed back into facts, equipment, and the best of personnel — men with not only general advertising experience in newspapers and agencies, but, more important, *radio* — an *organization* was welded together.

We have worked hard and how well we have succeeded is best shown by the fact that during the last six months period we placed 107% more national business (based upon the same group of 12 stations) than during the corresponding six months period of one year ago. Whereas the N.A.B. figures for the same identical period show a total national increase of only 31% for all stations.

The pioneering is not over, but tempered by experience, we are looking, building to the future. We will continue to keep faith and pace with you.



John Blair & Company

NEW YORK	CHICAGO	DETROIT	SAN FRANCISCO
341 Madison Ave.	520 N. Michigan Ave.	New Center Bldg.	3100 Russ Building
Murray Hill 2-6084	Superior 8660	Madison 7089	Douglas 3188

XUM

Sewing up the South *with WSM*

GENTLE advertiser, if you have a yen to follow the sun southward to the land of rising sales, here's Manna in the wilderness of advertising Claims! The little map above indicates a situation and a chance for you to go the old adage of a "stitch in time"—one better by sewing up the sales prospects of an entire section at one time by using one station, the giant Air Castle of the South—*WSM*. Here's the situation. These twenty (count 'em!) stations think so much of WSM programs that they are willing and eager to pick them up and rebroadcast them to their audiences! And that, we point out modestly, tells a story of southern broadcasting leadership which needs no further comment.

The map above not only spots the location of these stations, but should suggest how completely you can sew up the South by originating your campaign over WSM.

A letter of inquiry will bring facts and figures concerning this wireless network.

WEED	Rocky Mountain, N. C.
WTJS	Jackson, Tennessee
WRBL	Columbus, Georgia
WOPI	Bristol, Tennessee-Virginia
WMFR	High Point, N. C.
WPFB	Hattiesburg, Mississippi
KFXR	Oklahoma City, Oklahoma
WCBS	Springfield, Illinois
WAIM	Anderson, S. C.
WROL	Knoxville, Tennessee
WGCM	Gulfport, Mississippi
WCOC	Meridian, Mississippi
WPAD	Paducah, Kentucky
WATL	Atlanta, Georgia
WDSU	New Orleans, Louisiana
KABC	San Antonio, Texas
KIUN	Pecos, Texas
WLBC	Muncie, Indiana
WGH	Newport News, Virginia
WNBR	Memphis, Tennessee

WSM **50,000 WATTS**

National Representatives, Edward Petry & Co., Inc.

Owned and operated by THE NATIONAL LIFE & ACCIDENT INSURANCE COMPANY, INC., Nashville, Tennessee

★

★

★

THE NATION'S STATION *takes this occasion to pay tribute to the broadcasting industry at the conclusion of a year marked by radio's greatest success as well as some of the industry's greatest problems.*

To the individual men who manage and operate the vital industry of radio broadcasting WLW looks with confidence for continued progress and improvement.

THE CROSLEY RADIO CORPORATION, CINCINNATI

Styled TO NEW YORK!

WMCA caters to the tastes and interests of cosmopolitan New York with programs such as:

Madison Square Garden Sporting Events — direct from ringside broadcasts from New York's greatest sports arena.

Big League Baseball — thrilling reenactments of games played by the New York Yanks, Giants and Brooklyn Dodgers.

Good Will Court — the spectacular human-interest feature in which judges of New York courts give counsel to the law-bedeviled.

Banquets, Testimonials and Gala Theatrical Benefits — WMCA broadcasts more special events of this type than any other station in the world!

WMCA

WIP

No line charges on combination with WIP "Philadelphia's Pioneer Voice" or other stations of Inter-City Group.

WMCA

LOCAL INTEREST IS TH

Fashioned

TO PHILADELPHIA!

WIP

WIP caters to the likes and whims of homey Philadelphia with programs such as:

"The Mayor Speaks" — a civic interest feature broadcast direct from the Mayor's desk in City Hall.

Baseball — daily broadcasts from Shibe Park and Baker Bowl by Dolly Stark, famous National League umpire.

Homemaker's Club — Philadelphia's first Women's Club of the Air.

Remote Orchestras — WIP carries more local dance bands than all other Philadelphia stations combined.

Special Events — in a never ending parade. Recent events include the Davis Cup matches, Democratic National Convention, etc.

No line charges on combination with WMCA "New York's Own Station" or other stations of Inter-City Group.

WMCA

WIP

IS THE CRUX OF ADVERTISING SUCCESS

"People don't buy in summer!"

NAW — people don't buy *anything* in summertime! They don't buy summer clothes, or sport-supplies or electric fans, or beer, or boats, or insulation — or next winter's coal, do they? They don't even *eat*, do they?

And oh yes! — people don't listen to the radio in the summer, either! That's why the Democrats and the Republicans are climbing all over each other to dominate the air!

But enough of the ancient gags. If your customers are planning to sustain life until autumn, they've *got* to buy. How about asking them to buy *your* wares? And to issue the invitation, how about using radio? — the low-cost, high-value medium both winter *and summer!*

We've got some facts, if you want them.

FREE & SLEININGER, INC.

Radio Station Representatives

JAMES L. FREE, *Pres.-Treas.* H. PRESTON PETERS, *V. P.-Sec.*

NEW YORK	CHICAGO	DETROIT	SAN FRANCISCO	LOS ANGELES
WHO . . . (NBC) . . Des Moines	WAVE . (NBC) . . . Louisville	KSD . . (NBC) . . St. Louis		
WGR-WKBW (CBS) . . . Buffalo	WTCN . . . Minneapolis-St. Paul	KFWB . . . . . Los Angeles		
WHK . . . (CBS) . . Cleveland	KOIL . (NBC) . . . . Omaha	KOIN-KALE (CBS) . . . Portland		
KMBC . . (CBS) . Kansas City		KOL . . (CBS) . . . Seattle		

BROADCASTING
and
Broadcast Advertising

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NAB Faces Show Down at Chicago Conclave

President Launches Session With Encouraging Letter; Net-Independent Issue Seething; Eyes on Baldwin, Levy

WITH THE belief generally prevalent that the NAB has reached the "showdown" stage of a rather stormy existence, an unprecedented number of broadcasters were expected to attend the 14th annual convention of the trade association in Chicago July 6-8 in hope of composing factional differences.

Since the last convention, just a year ago, more feeling and bitterness has been engendered in broadcasting ranks than at any time since organized broadcasting began. The copyright issue was the main reason, and a clash between the major networks and the independently-owned stations is expected to culminate on the convention floor.

Even though time has had a healing effect since the difficulty first erupted early this year, it is evident that it has not subsided to the point where it will not have repercussions on the convention floor and become the chief issue. The networks have been outspoken in their opposition to James W. Baldwin, NAB managing director, who took office last July and who has been the storm center of the internal strife ever since.

Baldwin's Status

INDEPENDENT stations generally have faithfully rallied to the cause of Managing Director Baldwin, and have pronounced themselves determined to "rid" the NAB of "network control and domination". While network spokesmen are not openly demanding or even espousing Baldwin's replacement, it is known that they still regard him as "temperamentally unfit" for the position he holds, to use the phrase of several network spokesmen.

To those who have been through the NAB convention mill during the last dozen years or so, the independent versus network issue, with Managing Director Baldwin in the middle, is not viewed so importantly. They think it will spend its fury early in the convention and that a united industry will still be represented by NAB, little the worse for oratorical pyrotechnics. Baldwin's reappointment is expected.

Turning to things more basic, broadcasters found much solace in the words of President Roosevelt addressed to the industry through BROADCASTING Magazine on the occasion of the convention. There was far more than mere greeting and well-wishing to his message. They detected in it a well-grounded knowledge of radio and the work it is doing.

The old spectre of government ownership which has arisen annually at NAB conventions to haunt broadcasters, largely has disappeared by virtue of the firm entrenchment of the industry, and the repeatedly expressed statements by the chief executive that it cannot be in this country. President Roosevelt went a step farther in this year's statement. "There should be no monopoly in the moulding of public opinion," he said, "either government or private."

Broadcasters also saw in the President's letter a new peg upon which to hang their plea for three-year licenses, as against the six-month authorizations now issued. In his missive he mentioned "increased industrial stability". The industry long has contended that such stability can only come through a longer span of license life, particularly since the law itself permits three-year licenses. Since the old Radio Commission was created in 1927, broadcasters have existed on what amounts to a month-to-month basis.

Looking to the future of radio, and development of its visual offshoots, the President expressed his faith in the ability of broadcasters to utilize these new developments in the public interest. In one paragraph, he presented a challenge to broadcasters to take advantage of these opportunities, and at the same time dealt a smashing blow to those interlopers who seek to grab these new ultra-high channels for illusory or fantastic pursuits.

Managing Director Baldwin has stripped the convention agenda to the bone, for the avowed purpose of allowing every minute of available time for floor discussion. What develops in the way of industry politics will grow principally out of the results of a series of "rump conventions" contemplated by separate groups in the afternoon of the opening day. Of course, the atti-

President Proclaims Faith in Broadcasters

THE WHITE HOUSE
WASHINGTON

June 16, 1936

My dear Mr. Taishoff:

I note that the nation's broadcasters again are preparing for their annual meeting to take place in Chicago with the convening of the Fourteenth Annual Convention of the National Association of Broadcasters. It is a privilege to extend once again, through the Broadcasting Magazine, my greetings to the broadcasters and my wish for a most successful convention looking toward the goal of improved public service and increased industrial stability.

The importance of broadcasting as a medium for the dissemination of information and of entertainment to the public is recognized everywhere. On several occasions I have expressed my faith in American broadcasting and in American broadcasters. In a short span of time you have made remarkable strides.

Radio broadcasting not only is the great fire-side entertainer but has come to be a great moulder of public opinion. There should be no monopoly in the moulding of public opinion, either government or private.

Today broadcasters are faced with development of new and intriguing innovations in the field of radio. I refer to reports reaching me of laboratory achievements in visual radio and in the short wave field. When they will prove technically and economically practicable, of course, no one can foretell. But I have an abiding faith in American inventive genius and in the ability of the broadcasters to utilize these new developments in a way that will improve their service to the nation as a whole.

Very sincerely yours,

Franklin D. Roosevelt

Mr. Sol Taishoff,
Editor, Broadcasting Magazine,
Washington, D. C.

tude of the networks, as reflected in the floor discussion by their spokesmen will also be a governing factor.

The word "copyright" has no place on the convention agenda. Yet, as always, it will be hot topic because it has never lost the white heat with which it has been imbued since copyright cliques first found out that radio was an easy mark for the collection of tribute, and that the law, which has never been changed, permits them to go almost as far as they like. Even while the convention is under way there may be big developments on copyright (see story elsewhere in this issue).

Almost any day now it is confidently expected that Warner Bros. publishing houses, which caused a near panic in the industry last Dec. 31, will return to ASCAP. Talk of a change in formula for payment of royalties to ASCAP, whereby the same basis of payment would obtain for networks and stations alike, with the cost perhaps passed along directly to the advertiser, has reached serious proportions.

A United Industry

THE copyright spark, it is expected, will be touched off by Isaac D. Levy, NAB treasurer and part-owner of WCAU, as well as an important stockholder in CBS, at the opening day's session. He is scheduled for an address. Mr. Levy has been a prominent figure on copyright for the last half-dozen years and more than once has roused the convention into action.

In response to an inquiry from BROADCASTING, Mr. Levy said June 20: "You may quote me as saying that at the Convention I will tell the membership what has occurred in the past year, and I won't miss anything, nor will I spare anybody."

Varied reports have permeated the industry about the stand Mr. Levy will take. His views and those of Mr. Baldwin, have been as opposite as the poles. He served notice at the last NAB board meeting three months ago he would address the convention and attack the copyright methods employed by Mr. Baldwin. On the other hand a group of strong independents have stated they will align solidly behind Mr. Baldwin on the copyright issue, holding the view that the "networks" in signing five-year renewals a year ago on terms identical with those they had during the preceding three years, acted out of harmony with the industry as a whole.

Early this year the networks openly stated they saw no reason why they should remain in the NAB when its methods resulted in attacks upon them. Now, however, the network views appear to be that the NAB should be kept together as representing a united industry, even though the feeling toward Mr. Baldwin is far from sympathetic.

Our Headquarters

SUITE 1918-A, 1919-A and 1920-A in the Stevens Hotel will be the headquarters of the staff of BROADCASTING Magazine during the NAB convention. Visitors are cordially invited.

Daily Convention Issues of BROADCASTING

DURING the three days of the NAB convention—July 6, 7 and 8—BROADCASTING will publish a regular daily issue covering the spot news developments of the annual meeting. These complimentary issues will be distributed each morning as a service to those who are in attendance at the convention and no advertising space is being accepted for them.

BULLETIN

EXPANSION of Mutual Broadcasting System into a nation-wide network was definitely announced by Alfred J. McCosker, president of WOR, and chairman of MBS, in a statement June 28 disclosing completion of negotiations with the Don Lee Broadcasting System to add its four stations to the hook-up. In addition, it was announced that KFEL-KVOD, Denver, will be a way-link in the haul from Chicago to the coast and that negotiations were also in progress with other stations to be added.

Mr. McCosker's statement also named Fred Weber as general manager of the expanded network. Mr. Weber has been coordinator of MBS since its formation more than a year ago. It said that the national hookup would be in operation not later than Dec. 29, and perhaps earlier, presumably dependent upon FCC approval of CBS purchase of KNX. The Don Lee links will be KHJ, Los Angeles; KFRC, San Francisco; KGB, San Diego, and KDB, Santa Barbara.

It is expected that, in addition to KFEL-KVOD, MBS programs will be taken by KOIL, Omaha, and possibly KSO, Des Moines, with outlets also in Kansas City and St. Louis. [See detailed article on MBS expansion negotiations on Page 48, which went to press prior to this bulletin.]

The name of Philip G. Loucks, managing director of the NAB for four and one-half years, who resigned last July to reenter a law practice, has again been injected in NAB discussions. Mr. Loucks has stated he would not entertain any proposal to return to the NAB as its executive head. On the other hand, he is believed to be receptive to any proposition that might be advanced for his retention as advisory counsel or general counsel of the trade association.

The opening day's session promises to be exciting from several angles. In addition to addresses by President Leo J. Fitzpatrick, WJR, Detroit; Chairman E. O. Sykes of the FCC Broadcast Division, and Treasurer Levy, Managing Director Baldwin also will deliver his report. His now famous 21,000-word report on copyright, issued last Feb. 18, caused a furore because of its boldness and it is expected that something about this will develop on the floor.

Aside from copyright, Mr. Baldwin is expected to make several far-reaching recommendations for future NAB activity. He has been delving deeply into matters affecting industry economics, which tie into the work of the Joint Committee of Fifteen created by the NAB, Association of National Advertisers and American Association of Advertising Agencies, looking toward establishment of a Radio Research Bureau to devise a method of defining station coverage and listener habits which will be mutually satisfactory to the advertiser, agency and medium.

Mr. Baldwin has been giving serious thought to a proposal that such a bureau might be endowed in some outstanding school like the Pennsylvania University where specialized studies in business administration and research are encouraged. There would be no question about the disinterested, unbiased work of such an institution. His idea, roughly, encompasses contributions from all units of the broadcasting industry on a prorated basis, to maintain such a university bureau as a "proving-ground" for radio research.

Technical Problems

IT ALSO may develop that Mr. Baldwin will propose concentration of technical phases of radio research on an industry-wide basis in some other school or laboratory, to be maintained by industry contribution of the same character.

The proposal advanced in various quarters, and having the tacit approval of Mr. Baldwin, that several autonomous groups might be established within the industry, each to become a part of the NAB, also is expected to receive consideration. It has no place on the convention agenda but there is nothing to prevent it from being raised from the floor.

Crystallization of views on this plan is likely to develop Monday afternoon (July 6), which has been left open for group meetings. Among the groups likely to meet are Associated Independent Radio Stations Inc., potentially powerful alignment of some 150 stations rallied by Powel Crosley, Jr., president of Crosley Radio Corp., for the avowed purpose of combatting the copyright problem. Then there is National Independent Broadcasters Inc., formed last year under the leadership of Edward A. Allen, which admittedly has failed in its mission of procuring national business for local independents, but is still a strong block from the voting standpoint.

In addition, it is not unlikely that newspaper stations, banded together at the last convention by Walter J. Damm, WTMJ manager, will hold a session to decide what stand, if any, they should take in connection with NAB affairs. Moreover, about a dozen State broadcasters associations contemplate sessions during the convention.

A change in the tentative NAB program was made by Mr. Baldwin so that election of officers and a majority of the new board of directors will take place on the closing day, Wednesday, July 8, rather than on the preceding day. The tentative program has provided for the report of the commercial and engineering committees at the Wednesday morning

(*Continued on page 136*)

Program, NAB Convention

Stevens Hotel, Chicago — July 6-8

MONDAY, JULY 6
9:30 A. M.

Call to Order.
Address of Welcome: Edward J. Kelly, Mayor of Chicago.
Address of the President: Leo J. Fitzpatrick, WJR, Detroit.
Address of the Chairman, FCC Broadcast Division: Judge Eugene Octave Sykes, Wash., D. C.
Address of the Treasurer: Isaac D. Levy, WCAU, Philadelphia.
Report of the Managing Director: James W. Baldwin, Wash., D. C.
Appointment of Committees.
Announcements.
Adjournment.
No Afternoon Sessions Scheduled.
Committee Meetings (at call of chairman).
Nominating Committee.
Commercial Committee.
Engineering Committee.
Resolutions Committee.

TUESDAY, JULY 7
9:30 A. M.

Call to Order.
Cooperative Bureau of Radio Research: Arthur B. Church, KMBC, Kansas City.
Discussion.
What the Radio Business Census Means to the Radio Broadcasting Industry: C. H. Sandage, Chief, Division of Transportation and Communications, Bureau of the Census, Philadelphia.
Discussion.
A Panel Discussion: Organizing a station for selling Radio Advertising: H. K. Carpenter, WHK, Cleveland.
Discussion.

2:00 P. M.

Call to Order.
Report of Commercial Committee: Arthur B. Church, Chairman, KMBC, Kansas City.
Report of Engineering Committee: J. H. DeWitt, Chairman, WSM, Nashville.
Report of Resolutions Committee.

7:00 P. M.

Annual NAB Banquet:
Presentation of BROADCASTING Trophy to winner of Golf Tournament.
Entertainment.

WEDNESDAY, JULY 8
9:30 A. M.

Call to Order.
Report of Nominating Committee.
Election of Officers.

2:00 P. M.

Call to Order.
General Discussion.
Report of Elections Committee.
Installation of Officers.
Adjournment.

GENERAL INFORMATION

Registration Desk will be open from 10:00 A. M. until 1:00 P. M. Sunday, and from 8:30 A. M. until 5:00 P. M. on Monday, Tuesday and Wednesday.
Registration fee $10 per person. Banquet tickets may be purchased at Registration Desk at $3.50 each.
Sixth Annual NAB Championship Golf Tournament will be held Sunday for BROADCASTING Magazine Trophy. First foursome will tee off at 10:30 A. M.
All general sessions start promptly at 9:30 A. M.
All motions and resolutions offered by delegates must be in writing and handed to the Presiding Officer after presentation.

CHICAGO 1936 NAB
MAJOR NETWORKS
NAB
POWEL CROSLEY
JOHN L. CLARK
JOHN SHEPARD 3RD
ED ALLEN NIB
SOL ROSENBLATT
CROSLEY AIRS GROUP
HOOSE-GOW
WHAT DO YOU MEAN SINGING "SWEET ADELINE" WITHOUT PERMISSION??
SINGING "HOME SWEET HOME" IS AGIN THE LAW!!
BROAD-CASTER
WARNER BROS.
COURT
SUITS
MORE SOUR NOTES AND MINOR DISCORDS
MILLS ASCAP
ASRA
SESAC
FRED WARING
WARNER BROS.
AMP
COPYRIGHT BILL HEARINGS
BLAH
BUNK
HOOEY
YOUR DIME IS MY DIME
GAH-GAH
W.I. SIRONICH
VALLEE
G. BUCK
COUNSEL
MILLS
2 OF 'EM-COUNT
BROAD-CASTERS
DUFFY BILL
FACTS
FACTS
FCC REGULATIONS
JUDGE EUGENE O. SYKES, CHAIRMAN FCC BROADCAST DIVISION WILL LAY DOWN THE LAW
BROADCASTING
Broadcast Advertising
CONVENTION ISSUE
GEE, IT'S SWELL!
IT'S A HONEY!
IMMENSE!
TIME CONTRACTS
TIME CONTRACTS
AUDIT BUREAU
COPY-RIGHT
NETWORKS
AIRS
DUFFY BILL
JUNE 15TH HEARING
JIM BALDWIN
TOTIN' MY LOAD-
HAPPY AM I
PHIL LOUCKS
PHOOT LOOSE AND PHANCY PHREE
REGULATIONS
RESOLUTIONS
MINUTES
THE BUSIEST GAL IN TOWN-BERT SEIBERT NAB SECRETARY
NOT ME!!!
ALLAH PRALL
ALLAH CASE
ALLAH SYKES
ALLAH-CATION
WAILING WALL
ALLAH BE PRAISED IF WE GET THOSE THREE YEAR LICENSES
TECHNICAL PEEP SHOW
OH, GOODY FOR YOU AND ME!!!
TELEVISION
FACSIMILE
APEX
T.A.M. CRAVEN
A.D. RING
CHIEF
ASST CHIEF
HEY, GLENN, CALL HER MAE-SHE'S UTTERLY BEAUTIFUL!
AS CHAIRMAN OF THIS CONVENTION ENTERTAINMENT COMMITTEE I'VE GOT TO GET ENOUGH JUICE FOR THE BOYS-
LEO FITZPATRICK
GRAB BAG
WHO WILL BE THE NEXT PRESIDENT?
GLENN SNYDER WLS
THORNTON FISHER

NAB Forms Copyright Bureau With E. J. Fitzgerald as Head

Index of Active Music to Be Compiled as Well as Public Domain Library; Measured Service Later

Mr. Fitzgerald

CREATION of a "Bureau of Copyrights" within the NAB, under authority from the board of directors, was effected June 23 by James W. Baldwin, managing director, with the appointment of Edward J. Fitzgerald, formerly general music director of WLW, Cincinnati, as copyright director.

Mr. Fitzgerald, Mr. Baldwin announced, will begin at once to set up the bureau to undertake two of the three projects recommended by the managing director and approved by the board which are designed eventually to rid the broadcasting industry of its dependence upon ASCAP and other groups of copyright owners. These projects are: (1) To make available to broadcasters a complete and accurate index of active musical compositions; (2) to create a standard library of musical compositions taken, for the most part, from the public domain of music.

Commenting on the action, Mr. Baldwin declared that Congress has adjourned and "has failed to offer any relief to broadcasting by amending the ancient and archaic laws." The NAB, he added, has appointed a director of the Bureau of Copyrights "to execute the plans contained in the report approved by the board of directors on April 27, 1936."

Measured Service

THE THIRD phase of the Baldwin plan approved by the board covers creation of a system of making available to the industry copyrighted musical works on a measured service basis. This obviously must follow completion of the first two phases.

Mr. Fitzgerald will begin at once the cataloging of music in the public domain available at the Library of Congress. Simultaneously, he will work with E. C. Mills, ASCAP general manager, in copying ASCAP records of active compositions, in accordance with an offer made to the NAB several months ago. There are approximately 25,000 active musical compositions in this index, which later will be made available to all stations.

The broad plan for creation of the copyright bureau within the NAB looks also to the possible setting up of a separate corporation to handle copyrighted works for radio. This phase of the project will be considered at the NAB convention, under present plans.

Mr. Fitzgerald was selected by Mr. Baldwin for the important post from among a score of applicants. He was chosen because of his wide experience in publishing, composing, arranging and, most important, his practical radio experience at WLW from January 1934, until May of this year.

Mr. Fitzgerald, 38, is a graduate of Boston Latin School, and for four years attended the New England Conservatory of Music, specializing in theory, harmony, counterpoint, composition, instrumentation and orchestration. From 1922 until 1929 he was an arranger, and wrote special vaudeville material and popular songs for Leo Fiest Inc., Copley Plaza Orchestras, and Jerome Remick & Co.

In 1929 Mr. Fitzgerald became president and managing director of Eddie Fitzgerald Inc., Boston. He engaged in devising, writing, selling and producing advertising style shows, vaudeville units and commercial broadcasts. Some of these were the Stetson Shoe Co. style show, the Kelvinator Choirs, Jordan Marsh Co. broadcasts and Colt Shoe Co. broadcasts. In 1934 he joined Crosley as program idea man and music arranger for WLW and WSAI. Later he was made a member of the audition board and the program planning board, and in 1934 was made general music director. In that capacity he supervised 75 musicians. He had a staff of eight arrangers and eight copyists of music and supervised the arranging of approximately 50 musical numbers a week. Since the inception of the copyright department at WLW, which he organized, not one suit had been filed against the station for infringement up to May 1, when he resigned.

Bosch Discs to 250

UNITED AMERICAN BOSCH Corp., Springfield, Mass. (Bosch radios) in mid-July will place 13 one-minute dramatized announcements, transcribed by RCA-Victor, on some 250 stations. The Bosch agency, E. T. Howard Co., New York, will ship the discs to local distributors to be placed at local rates if possible. Bosch carried out a similar spot campaign last year.

THE GREATER THE RADIO AUDIENCE THE MORE REPUBLICAN VOTES!
RADIO CAPTAINS
HOW THEY HELP REACH THE VOTERS
MOTOR SQUADRONS
FOR A REPUBLICAN RALLY ON EVERY STREET CORNER!

GOP to Use Radio Methods

THE Republican Party has arranged elaborate plans for dramatization of its radio activities and has drawn up a series of display boards depicting its plan of campaign. Thomas G. Sabin, director of the GOP radio division, gave a preview of the campaign at the Cleveland convention.

Three of the panels are shown here. The top one points out that 38,710,888 adult listeners await "The Voice at the Microphone". In it is BROADCASTING'S map of the United States, showing location of radio stations.

The center panel shows how "radio captains" can reach voters. Typical scenes show how voters can be presented with campaign facts by radio and telephone.

In the third photo attention of GOP workers is directed to use of radio-equipped autos and getting word to listeners whose autos have radios.

"Phenomenon" Disc Series to Be Offered Public Utilities for Local Sponsorship

ON THE CREST of an intensive promotion campaign, *Phenomenon*, script feature which won spontaneous approval when sponsored by a Kansas City utility over KMBC, soon will be offered to public utility companies throughout the country for local sponsorship by Associated Music Publishers Inc., which is recording the series in New York.

The feature, conceived and written by Ted Malone, former program director of KMBC, is regarded by M. E. Tompkins, president of AMP, as a "natural" for public utilities because it "sells by suggestion" and "educates by entertaining". The story is devoted entirely to electricity but brings in ancient history and inserts the phenomena of modern electricity in those historical incidents. Every episode attempts to bring in unobtrusively the low cost of electricity and the ease with which everything may be done electrically in the modern home. Mr. Tompkins declares it is an all-family program.

Some weeks ago, when AMP contracted for exclusive rights to *Phenomenon*, a furore was caused because of the publication of an erroneous report that the North American Co., parent of AMP, intended using the program as an anti-administration, anti-government ownership propaganda vehicle. Instead, Mr. Tompkins announces it is being offered competitively to public utilities for local sponsorship.

As part of its promotion campaign, AMP has published a brochure titled *Flick the Switch*, the purpose of which is to show that no program can be completely successful without merchandising. The book goes into plans for rebroadcast publicity, audience-expansion activities, merchandising plans, contests and other new ideas for bringing the program favorably to the attention of the audience. All merchandising is to be conducted through appliance stores in the territory of the sponsor as well as through his own retail sales outlets.

Mr. Malone is author of several other well-known programs, including *Happy Hollow*, a "home-town" script now heard daily over a nationwide CBS network. Another is *Between the Book Ends*, also on CBS. *Phenomenon* was sponsored over KMBC by the Kansas City Power & Light Co. as a live program.

NEW DAY PROGRAMS PLANNED BY P & G

PROCTER & GAMBLE Co., Cincinnati, has signed three contracts with NBC for new programs to be heard on the NBC-Blue network, thus passing General Mills to become the leading daytime network advertiser. The new programs are *Pepper Young's Family* for Camay soap; an untitled dramatic program for Ivory Flakes and *Five Star Jones* for Oxydol, all to be on the NBC-Blue before the summer is out. In addition P & G has renewed six other programs on NBC networks. Most of the contracts were for a year.

P & G at present is using only daytime radio periods although new programs are expected to be announced shortly. According to the present set-up the 10:45 a. m. and 11 a. m. periods on the Blue network are open with P & G programs scheduled both before and after these time openings. It is understood, however, that the soap manufacturer will take these openings if and when the required stations can clear the time. Edward MacHugh, gospel singer, and a big puller of fan mail, is to be signed for one of these spots.

P & G is understood to be planning to spend a major portion of its 1936-1937 advertising budget for radio. Last year P & G spent $2,105,237 for radio time alone on NBC, which it uses exclusively. The figures, of course, do not include spot, which the sponsor uses to a big extent. So far this year P & G has used announcements and transcriptions for White Naptha, Crisco, Lava soap, Drene soap and other products. An especially heavy schedule is being used behind White Naptha to combat Fels & Co., (Fels-Naptha soap and flakes), also a big radio user.

Three agencies are concerned in the P & G schedules on NBC: Blackett-Sample-Hummert Inc., Chicago, handles the Oxydol accounts; Pedlar & Ryan Inc., New York, is the agency for Camay soap; Blackman Adv. Inc., New York, has Ivory soap, Ivory flakes, Chipso, and Crisco.

Selling Beer to Women

CHRISTIAN FEIGENSPAN BREWING Corp., Newark, (P. O. N, beer) on July 6, 9-9:15 a. m., will start Helen Leighton in a program of interest to women on a three-station network, the program originating at WMCA, New York, and going to WNEW, Newark, and WAAT, Jersey City. It will be heard Mondays through Saturdays and is signed for 13 weeks. Bess & Schillin Inc., New York, placed the account.

Census of
Radio Homes in the United States by States and Counties

(As prepared by Joint Committee on Radio Research of Association of National Advertisers, American Association of Advertising Agencies and National Association of Broadcasters)

RADIO SET ownership by families in each of the more than 3,000 counties of the United States, along with totals for the individual states, are published herewith. These estimates as of Jan. 1, 1936, were made by the Joint Committee on Radio Research, which is equally representative of the Association of National Advertisers, National Association of Broadcasters, and American Association of Advertising Agencies.

The figures were drafted by the technical subcommittee of the Joint Committee, headed by L. D. H. Weld, research director of McCann-Erickson, Inc. They complete the first task undertaken by the Joint Committee since its creation about a year ago for the projected purpose of setting up a cooperative bureau to audit station coverage and listener habits and gather radio set ownership data. Having completed this first phase of its work, the Joint Committee is speeding forward with other researches and last month named Paul F. Peter, prominent in radio research, as its secretary.

Last April, the Joint Committee made public an estimate of 22,869,000 families in the country owning receivers out of a total of 30,919,300 American families. This figure also was as of Jan. 1, 1936. The totals for the counties and the states, published herewith, equal this original estimate. The county figure compares with the estimate of 21,456,000 radio homes last year, or an increase of 6.6%. [See Page 14 of 1936 BROADCASTING Yearbook.]

There has been no official radio census since 1930 when the U. S. Census Bureau made a count as a part of the decennial population census.

The technical subcommittee of the Joint Committee, which drafted the county figures, in addition to Chairman Weld, includes Herman S. Hettinger, University of Pennsylvania, NAB research consultant; Arthur W. Lehman, ANA; D. E. Robinson, Federal Adv. Agency, New York; John W. Karol, CBS; Hugh M. Bevel Jr., NBC; D. P. Smelser, Procter & Gamble Co., Cincinnati, and George Gallup, Young & Rubicam, N. Y.

The Joint Committee, of which John Benson, AAAA president is chairman, comprises (for the NAB): Arthur B. Church, KMBC, Hugh K. Boice, CBS; Roy O. Witmer, NBC; Alfred J. McCosker, WOR, and J. O. Maland, WHO, with James W. Baldwin, NAB managing director, ex officio; (for AAAA): Mr. Benson, Mr. Weld, Mr. Gallup, Charles S. Gannon, Arthur Kudner, Inc., and Frederick C. Gamble, executive secretary AAAA; (for ANA): Paul B. West, president; M. H. Leister, Sun Oil Co.; Stuart Peabody, Bordon Co.; Mr. Smelser, and Harold Thomas, Centaur Co.

[Text of Joint Committee's statement covering method of computing county estimates will be found on Page 140.]

Alabama

Total Radio Homes: 258,000

Autauga	1,300
Baldwin	2,300
Barbour	2,500
Bibb	1,400
Blount	1,700
Bullock	1,400
Butler	2,400
Calhoun	5,900
Chambers	2,700
Cherokee	1,200
Chilton	2,000
Choctaw	1,100
Clarke	2,000
Clay	1,300
Cleburne	800
Coffee	2,300
Colbert	2,700
Conecuh	1,800
Coosa	800
Covington	3,500
Crenshaw	1,800
Cullman	3,500
Dale	1,700
Dallas	5,600
De Kalb	2,800
Elmore	2,700
Escambia	2,800
Etowah	6,800
Fayette	1,300
Franklin	2,000
Geneva	2,100
Greene	1,300
Hale	1,600
Henry	1,500
Houston	4,300
Jackson	2,500
Jefferson	62,100
Lamar	1,200
Lauderdale	4,500
Lawrence	1,600
Lee	3,500
Limestone	2,700
Lowndes	1,300
Macon	2,000
Madison	6,300
Marengo	2,600
Marion	1,700
Marshall	3,200
Mobile	19,300
Monroe	2,000
Montgomery	15,400
Morgan	4,800
Perry	1,900
Pickens	1,600
Pike	2,800
Randolph	2,000
Russell	1,900
St. Clair	1,800
Shelby	2,200
Sumter	1,800
Talladega	4,200
Tallapoosa	2,500
Tuscaloosa	6,700
Walker	5,100
Washington	1,000
Wilcox	1,600
Winston	1,300

Arizona

Total Radio Homes: 62,500

Apache	1,400
Cochise	4,900
Coconino	2,500
Gila	3,000
Graham	1,200
Greenlee	700
Maricopa	25,500
Mohave	1,000
Navajo	2,700
Pima	9,400
Pinal	2,100
Santa Cruz	1,300
Yavapai	4,200
Yuma	2,600

Arkansas

Total Radio Homes: 187,300

Arkansas	2,700
Ashley	2,100
Baxter	700
Benton	3,900
Boone	1,800
Bradley	1,800
Calhoun	600
Carroll	1,500
Chicot	2,000
Clark	2,500
Clay	2,100
Cleburne	800
Cleveland	900
Columbia	2,300
Conway	1,800
Craighead	4,900
Crawford	1,900
Crittenden	3,100
Cross	2,100
Dallas	1,300
Desha	2,000
Drew	1,600
Faulkner	2,500
Franklin	1,200
Fulton	700
Garland	5,900
Grant	700
Greene	2,300
Hempstead	2,800
Hot Spring	1,400
Howard	1,600
Independence	2,200
Izard	800
Jackson	2,400
Jefferson	7,200
Johnson	1,600
Lafayette	1,300
Lawrence	1,800
Lee	1,900
Lincoln	1,400
Little River	1,100
Logan	2,000
Lonoke	2,500
Madison	900
Marion	500
Miller	3,800
Mississippi	6,900
Monroe	1,700
Montgomery	700
Nevada	1,600
Newton	600
Ouachita	3,300
Perry	400
Phillips	4,600
Pike	800
Poinsett	2,300
Polk	1,400
Pope	2,500
Prairie	1,200
Pulaski	24,900
Randolph	1,300
St. Francis	2,900
Saline	1,200
Scott	1,000
Searcy	700
Sebastian	9,600
Sevier	1,300
Sharp	700
Stone	500
Union	7,000
Van Buren	700
Washington	5,900
White	3,400
Woodruff	1,800
Yell	1,500

California

Total Radio Homes: 1,398,900

Alameda	132,100
Alpine	20
Amador	1,600
Butte	7,200
Calaveras	730
Colusa	2,200
Contra Costa	13,500
Del Norte	910
Eldorado	1,500
Fresno	32,100
Glenn	2,300
Humboldt	7,900
Imperial	9,700
Inye	1,100
Kern	17,600
Kings	4,400
Lake	1,200
Lassen	2,800
Los Angeles	592,800
Madera	2,400
Marin	9,300
Mariposa	670
Mendocino	3,900
Merced	6,100
Modoc	990
Mono	200
Monterey	13,200
Napa	4,900
Nevada	3,000
Orange	21,900
Placer	4,800
Plumas	1,100
Riverside	14,300
Sacramento	33,400
San Benito	2,200
San Bernardino	25,900
San Diego	54,300
San Francisco	170,000
San Joaquin	22,300
San Luis Obispo	6,700
San Mateo	18,600
Santa Barbara	16,900
Santa Clara	38,400
Santa Cruz	9,100
Shasta	3,200
Sierra	300
Siskiyou	4,500
Solano	7,800
Sonoma	16,300
Stanislaus	12,700
Sutter	1,700
Tehama	2,700
Trinity	380
Tulare	12,900
Tuolumne	1,600
Ventura	11,300
Yolo	4,300
Yuba	3,000

Colorado

Total Radio Homes: 206,600

Adams	3,000
Alamosa	1,910
Arapahoe	3,600
Archuleta	460
Baca	1,150
Bent	1,260
Boulder	7,600
Chaffee	1,720
Cheyenne	460
Clear Creek	460
Conejos	920
Costillo	460
Crowley	690
Custer	230
Delta	2,600
Denver	73,800
Dolores	120
Douglas	500
Eagle	580
Elbert	800
El Paso	13,100
Fremont	3,200
Garfield	1,840
Gilpin	250
Grand	460
Gunnison	1,040
Hinsdale	80
Huerfano	2,100
Jackson	340
Jefferson	3,400
Kiowa	350
Kit Carson	1,380
Lake	1,270
La Plata	2,400
Larimer	6,800
Las Animas	4,900
Lincoln	1,150
Logan	3,700
Mesa	5,600
Mineral	120
Moffat	800
Montezuma	1,040
Montrose	2,300
Morgan	3,300
Otero	4,400
Ouray	350
Park	460
Phillips	1,270
Pitkin	230
Prowers	2,200
Pueblo	14,000
Rio Blanco	460
Rio Grande	1,700
Routt	1,500
Saguache	800
San Juan	350
San Miguel	350
Sedgwick	920
Summit	230
Teller	920
Washington	1,150
Weld	10,000
Yuma	2,070

Connecticut

Total Radio Homes: 372,200

Fairfield	90,300
Hartford	98,500
Litchfield	19,600
Middlesex	11,600
New Haven	106,100
New London	27,400
Tolland	6,200
Windham	12,500

Delaware

Total Radio Homes: 47,100

Kent	5,100
New Castle	35,000
Sussex	7,000

District of Columbia

Total Radio Homes: 125,800

Florida

Total Radio Homes: 233,900

Alachua	4,400
Baker	500
Bay	1,600
Bradford	800
Brevard	1,900
Broward	3,200
Calhoun	500
Charlotte	600
Citrus	500
Clay	600
Collier	300
Columbia	1,300
Dade	35,800
De Soto	1,200
Dixie	600
Duval	30,800
Escambia	8,200
Flagler	300
Franklin	600
Gadsden	2,500
Gilchrist	300
Glades	300
Gulf	200
Hamilton	700
Hardee	1,100
Hendry	500
Hernando	600
Highlands	1,600
Hillsborough	28,100
Holmes	700
Indian River	800
Jackson	2,800
Jefferson	900
Lafayette	300
Lake	3,300
Lee	2,500
Leon	3,500
Levy	800
Liberty	200
Madison	1,200
Manatee	3,500
Marion	3,700
Martin	700
Monroe	1,600
Nassau	800
Okaloosa	700
Okeechobee	400
Orange	10,400
Osceola	1,000
Palm Beach	10,200
Pasco	1,200
Pinellas	15,500
Polk	11,900
Putnam	2,200
St. Johns	2,900
St. Lucie	1,300
Santa Rosa	1,100
Sarasota	2,400
Seminole	2,500
Sumter	800
Suwannee	1,300
Taylor	1,200
Union	400
Volusia	7,300
Wakulla	300
Walton	1,100
Washington	900

Georgia

Total Radio Homes: 334,500

Appling	1,100
Atkinson	500
Bacon	600
Baker	500
Baldwin	2,300
Banks	500
Barrow	1,100
Bartow	2,400
Ben Hill	1,500
Berrien	1,100
Bibb	14,200
Bleckley	800
Brantley	400
Brooks	1,600
Bryan	400
Bulloch	1,900
Burke	2,300
Butts	900
Calhoun	900
Camden	500
Campbell (Incl. in Fulton)	
Candler	700
Carroll	3,100
Catoosa	600
Charlton	400
Chatham	18,900
Chattahoochee	300
Chattooga	1,600
Cherokee	1,700
Clarke	5,200
Clay	500
Clayton	800
Clinch	600
Cobb	3,600
Coffee	1,500
Colquitt	3,100
Columbia	500
Cook	1,000
Coweta	2,600
Crawford	400
Crisp	2,000
Dade	200
Dawson	200
Decatur	2,000
De Kalb	9,400
Dodge	1,800
Dooly	1,300
Dougherty	3,700
Douglas	900
Early	1,200
Echols	200
Effingham	700
Elbert	1,800
Emanuel	2,000
Evans	600
Fannin	800
Fayette	600
Floyd	7,600
Forsyth	600
Franklin	1,200
Fulton	68,300
(Incl. Campbell & Milton)	
Gilmer	400
Glascock	300
Glynn	2,800
Gordon	1,400
Grady	1,500
Greene	1,100
Gwinnett	2,300
Habersham	1,200
Hall	3,800
Hancock	900
Haralson	1,100
Harris	800
Hart	1,200
Heard	500
Henry	1,200
Houston	900
Irwin	800
Jackson	1,700
Jasper	700
Jeff Davis	700
Jefferson	1,600

(Continued on page 24)

CENSUS OF U. S. RADIO HOMES BY STATES AND COUNTIES

(Continued from page 23)

Georgia (Cont'd)

Jenkins	1,000
Johnson	900
Jones	500
Lamar	900
Lanier	300
Laurens	3,000
Lee	500
Liberty	500
Lincoln	500
Long	300
Lowndes	3,800
Lumpkin	400
McDuffie	900
McIntosh	500
Macon	1,300
Madison	1,100
Marion	500
Meriwether	1,800
Miller	600
Milton (Incl. in Fulton)	
Mitchell	1,700
Monroe	1,000
Montgomery	700
Morgan	1,100
Murray	500
Muscogee	12,700
Newton	1,900
Oconee	400
Oglethorpe	800
Paulding	800
Peach	1,100
Pickens	800
Pierce	900
Pike	700
Polk	2,800
Pulaski	800
Putnam	700
Quitman	200
Rabun	500
Randolph	1,400
Richmond	13,500
Rockdale	600
Schley	400
Screven	1,500
Seminole	500
Spalding	3,300
Stephens	1,200
Stewart	900
Sumter	2,800
Talbot	600
Taliaferro	400
Tattnall	900
Taylor	900
Telfair	1,400
Terrell	1,500
Thomas	3,500
Tift	1,700
Toombs	1,600
Towns	200
Treutlen	600
Troup	5,300
Turner	900
Twiggs	500
Union	300
Upson	2,300
Walker	2,300
Walton	1,800
Ware	3,700
Warren	800
Washington	2,100
Wayne	1,100
Webster	300
Wheeler	500
White	300
Whitfield	2,600
Wilcox	900
Wilkes	1,300
Wilkinson	700
Worth	1,400

Idaho

Total Radio Homes: 75,800

Ada	8,900
Adams	400
Bannock	6,200
Bear Lake	1,200
Benewah	800
Bingham	2,400
Blaine	600
Boise	200
Bonner	1,700
Bonneville	3,400
Boundary	700
Butte	220
Camas	210
Canyon	5,400
Caribou	400
Cassia	2,100
Clark	120
Clearwater	900
Custer	440
Elmore	900
Franklin	1,300
Fremont	1,200
Gem	1,000
Gooding	1,000
Idaho	1,600
Jefferson	900
Jerome	1,100
Kootenai	2,600
Latah	3,600
Lemhi	700
Lewis	900
Lincoln	500
Madison	1,300
Minidoka	1,200

Idaho (Cont'd)

Nez Perce	4,400
Oneida	700
Owyhee	300
Payette	1,400
Power	600
Sheshone	3,500
Teton	400
Twin Falls	6,300
Valley	600
Washington	1,500
Yellowstone National Park	10

Illinois

Total Radio Homes: 1,674,300

Adams	15,000
Alexander	4,100
Bond	2,900
Boone	3,800
Brown	1,700
Bureau	7,100
Calhoun	1,000
Carroll	4,600
Cass	3,400
Champaign	15,200
Christian	7,500
Clark	3,500
Clay	3,000
Clinton	3,300
Coles	8,000
Cook	908,300
Crawford	4,600
Cumberland	1,300
De Kalb	8,700
De Witt	3,500
Douglas	3,400
Du Page	22,200
Edgar	4,700
Edwards	1,400
Effingham	4,500
Fayette	3,600
Ford	3,500
Franklin	8,100
Fulton	9,000
Gallatin	1,400
Greene	3,400
Grundy	3,800
Hamilton	1,800
Hancock	5,300
Hardin	700
Henderson	1,200
Henry	11,100
Iroquois	6,300
Jackson	6,200
Jasper	1,800
Jefferson	4,800
Jersey	2,300
Jo Daviess	4,200
Johnson	1,100
Kane	29,700
Kankakee	10,600
Kendall	1,900
Knox	13,900
Lake	24,300
La Salle	22,500
Lawrence	4,000
Lee	7,400
Livingston	8,100
Logan	6,000
McDonough	7,200
McHenry	8,500
McLean	18,900
Macon	20,200
Macoupin	8,000
Madison	28,100
Marion	7,800
Marshall	2,600
Mason	3,800
Massac	2,000
Menard	1,900
Mercer	4,000
Monroe	2,900
Montgomery	6,700
Morgan	8,000
Moultrie	2,200
Ogle	6,400
Peoria	32,300
Perry	4,000
Piatt	2,700
Pike	3,800
Pope	1,000
Pulaski	1,800
Putnam	900
Randolph	5,200
Richland	3,200
Rock Island	21,700
St. Clair	32,300
Saline	5,700
Sangamon	26,300
Schuyler	2,000
Scott	1,500
Shelby	5,100
Stark	2,000
Stephenson	10,500
Tazewell	8,800
Union	3,100
Vermilion	18,100
Wabash	2,500
Warren	5,300
Washington	3,300
Wayne	2,800
White	3,300
Whiteside	9,500
Will	21,900

Illinois (Cont'd)

Williamson	7,500
Winnebago	27,900
Woodford	4,400

Indiana

Total Radio Homes: 616,800

Adams	3,000
Allen	34,900
Bartholomew	5,200
Benton	2,000
Blackford	2,100
Boone	4,600
Brown	400
Carroll	3,000
Cass	7,000
Clark	4,500
Clay	4,100
Clinton	5,900
Crawford	900
Daviess	2,700
Dearborn	3,600
Decatur	3,100
De Kalb	4,000
Delaware	13,100
DuBois	3,300
Elkhart	15,000
Fayette	3,700
Floyd	6,600
Fountain	2,800
Franklin	2,000
Fulton	3,500
Gibson	5,200
Grant	10,800
Greene	4,100
Hamilton	4,000
Hancock	3,200
Harrison	2,500
Hendricks	3,300
Henry	6,100
Howard	7,700
Huntington	6,000
Jackson	3,600
Jasper	2,200
Jay	5,100
Jefferson	3,200
Jennings	1,500
Johnson	3,100
Knox	7,600
Kosciusko	5,500
Lagrange	2,200
Lake	46,100
La Porte	12,600
Lawrence	4,800
Madison	15,700
Marion	102,900
Marshall	4,500
Martin	1,000
Miami	5,500
Monroe	6,100
Montgomery	5,500
Morgan	3,000
Newton	1,900
Noble	3,900
Ohio	600
Orange	2,000
Owen	1,600
Parke	2,600
Perry	2,000
Pike	1,900
Porter	4,400
Posey	2,700
Pulaski	1,800
Putnam	3,600
Randolph	4,900
Ripley	3,000
Rush	3,600
St. Joseph	29,400
Scott	900
Shelby	4,700
Spencer	2,100
Starke	1,600
Steuben	2,300
Sullivan	4,200
Switzerland	1,200
Tippecanoe	11,700
Tipton	2,800
Union	1,000
Vanderburg	24,300
Vermillion	2,900
Vigo	21,300
Wabash	4,800
Warren	1,100
Warrick	2,500
Washington	2,000
Wayne	11,100
Wells	2,900
White	2,900
Whitley	3,000

Iowa

Total Radio Homes: 503,100

Adair	2,500
Adams	1,900
Allamakee	2,800
Appanoose	3,800
Audubon	2,100
Benton	4,600
Black Hawk	15,900
Boone	4,900
Bremer	3,400
Buchanan	3,200
Buena Vista	3,800
Butler	3,100
Calhoun	2,600
Carroll	5,100
Cass	5,000

Iowa (Cont'd)

Cedar	3,200
Cerro Gordo	8,600
Cherokee	3,400
Chickasaw	2,200
Clarke	1,900
Clay	3,600
Clayton	4,200
Clinton	9,800
Crawford	3,500
Dallas	4,900
Davis	2,100
Decatur	2,100
Delaware	2,600
Des Moines	8,400
Dickinson	2,000
Dubuque	13,500
Emmet	2,700
Fayette	5,400
Floyd	3,400
Franklin	2,400
Fremont	2,300
Greene	3,200
Grundy	2,400
Guthrie	3,400
Hamilton	3,600
Hancock	2,400
Hardin	4,700
Harrison	3,900
Henry	3,100
Howard	2,700
Humboldt	1,800
Ida	2,200
Iowa	3,300
Jackson	3,700
Jasper	5,700
Jefferson	3,100
Johnson	7,900
Jones	3,200
Keokuk	3,500
Kossuth	4,500
Lee	9,000
Linn	21,800
Louisa	1,800
Lucas	3,100
Lyon	2,400
Madison	2,400
Mahaska	5,200
Marion	4,400
Marshall	7,700
Mills	2,200
Mitchell	2,600
Monona	2,600
Monroe	2,000
Montgomery	4,100
Muscatine	6,800
O'Brien	3,900
Osceola	1,700
Page	6,200
Palo Alto	2,800
Plymouth	4,200
Pocahontas	2,500
Polk	44,400
Pottawattamie	14,100
Poweshiek	4,100
Ringgold	1,900
Sac	3,200
Scott	18,200
Shelby	3,300
Sioux	4,700
Story	7,100
Tama	4,300
Taylor	2,800
Union	3,300
Van Buren	2,500
Wapello	9,000
Warren	3,100
Washington	4,500
Wayne	2,500
Webster	8,900
Winnebago	2,600
Winneshiek	3,800
Woodbury	24,600
Worth	1,800
Wright	3,800

Kansas

Total Radio Homes: 348,000

Allen	3,300
Anderson	2,000
Atchison	4,200
Barber	1,600
Barton	4,200
Bourbon	4,100
Brown	3,600
Butler	5,400
Chase	1,100
Chautauqua	1,500
Cherokee	4,500
Cheyenne	1,100
Clark	800
Clay	3,000
Cloud	3,100
Coffey	2,300
Comanche	1,000
Cowley	7,700
Crawford	9,200
Decatur	1,500
Dickinson	5,500
Doniphan	2,100
Douglas	5,000
Edwards	1,200
Elk	1,200
Ellis	2,800
Ellsworth	2,000
Finney	2,100

Kansas (Cont'd)

Ford	3,900
Franklin	4,300
Geary	3,100
Gove	700
Graham	800
Grant	400
Gray	700
Greeley	200
Greenwood	3,200
Hamilton	500
Harper	2,400
Harvey	4,300
Haskell	300
Hodgeman	600
Jackson	2,200
Jefferson	1,900
Jewell	2,400
Johnson	4,300
Kearny	400
Kingman	2,000
Kiowa	800
Labette	6,000
Lane	700
Leavenworth	7,100
Lincoln	1,600
Linn	2,200
Logan	700
Lyon	6,400
McPherson	5,500
Marion	3,900
Marshall	4,200
Meade	1,000
Miami	3,700
Mitchell	3,000
Montgomery	9,500
Morris	2,100
Morton	600
Nemaha	3,500
Neosho	4,100
Ness	1,600
Norton	2,600
Osage	2,300
Osborne	2,100
Ottawa	1,600
Pawnee	1,900
Phillips	2,000
Pottawatomie	2,600
Pratt	2,300
Rawlins	1,200
Reno	10,000
Republic	2,400
Rice	2,500
Riley	4,800
Rooks	1,600
Rush	1,700
Russell	1,800
Saline	7,300
Scott	600
Sedgwick	34,600
Seward	1,500
Shawnee	21,700
Sheridan	800
Sherman	1,300
Smith	2,200
Stafford	1,700
Stanton	300
Stevens	500
Sumner	4,700
Thomas	1,600
Trego	900
Wabaunsee	1,800
Wallace	300
Washington	2,800
Wichita	300
Wilson	2,800
Woodson	1,100
Wyandotte	21,900

Kentucky

Total Radio Homes: 313,800

Adair	1,100
Allen	1,500
Anderson	900
Ballard	1,000
Barren	2,700
Bath	800
Bell	4,100
Boone	1,100
Bourbon	2,500
Boyd	7,500
Boyle	2,500
Bracken	1,200
Breathitt	1,200
Breckinridge	1,400
Bullitt	800
Butler	800
Caldwell	1,600
Calloway	2,200
Campbell	10,000
Carlisle	800
Carroll	1,100
Carter	1,700
Casey	1,000
Christian	4,000
Clark	2,500
Clay	1,000
Clinton	500
Crittenden	1,100
Cumberland	700
Daviess	6,000
Edmonson	700
Elliott	400
Estill	1,400
Fayette	16,100
Fleming	1,400
Floyd	2,900

Kentucky (Cont'd)

Franklin	3,100
Fulton	2,300
Gallatin	400
Garrard	1,100
Grant	1,000
Graves	3,500
Grayson	1,600
Green	800
Greenup	2,000
Hancock	600
Hardin	2,600
Harlan	5,900
Harrison	2,000
Hart	1,200
Henderson	3,000
Henry	1,300
Hickman	1,000
Hopkins	4,100
Jackson	600
Jefferson	71,700
Jessamine	1,300
Johnson	1,900
Kenton	17,100
Knott	800
Knox	1,700
Larue	800
Laurel	1,500
Lawrence	1,200
Lee	600
Leslie	600
Letcher	2,900
Lewis	1,100
Lincoln	1,500
Livingston	700
Logan	2,200
Lyon	600
McCracken	7,600
McCreary	1,200
McLean	1,000
Madison	3,500
Magoffin	1,200
Marion	1,700
Marshall	1,300
Martin	500
Mason	2,700
Meade	800
Menifee	300
Mercer	1,900
Metcalfe	500
Monroe	1,000
Montgomery	1,600
Morgan	900
Muhlenberg	3,500
Nelson	2,100
Nicholas	900
Ohio	2,100
Oldham	800
Owen	1,000
Owsley	400
Pendleton	1,000
Perry	4,000
Pike	4,200
Powell	300
Pulaski	3,000
Robertson	200
Rockcastle	1,100
Rowan	900
Russell	800
Scott	1,800
Shelby	2,100
Simpson	1,300
Spencer	600
Taylor	1,300
Todd	1,200
Trigg	1,000
Trimble	500
Union	1,800
Warren	4,500
Washington	1,300
Wayne	1,000
Webster	2,000
Whitley	2,900
Wolfe	500
Woodford	1,400

Louisiana

Total Radio Homes: 280,000

Acadia	4,000
Allen	1,400
Ascension	1,700
Assumption	1,300
Avoyelles	2,600
Beauregard	1,300
Bienville	1,800
Bossier	2,200
Caddo	23,600
Calcasieu	6,500
Caldwell	900
Cameron	300
Catahoula	900
Claiborne	2,800
Concordia	1,000
De Soto	2,600
East Baton Rouge	12,100
East Carroll	1,400
East Feliciana	1,200
Evangeline	1,600
Franklin	2,400
Grant	1,300
Iberia	2,800
Iberville	2,300
Jackson	1,400
Jefferson	3,500
Jefferson Davis	2,200
Lafayette	4,200
Lafourche	3,000

(Continued on page 28)

W·H·O TALENT PAYS SALES DIVIDENDS

FOR GRAIN BELT
FOR GINGHAM GIRL
FOR CHEVROLET
FOR KELLOGG

POWER AND AUDIENCE JUSTIFY BIG-TIME ACTS

In studios, production staff and talent, Station WHO is in position to produce any type of "live" broadcast. Whether the advertiser wants a modest show or big-time talent, WHO can meet his requirements. Here are current examples:

GRAIN BELT BEER—Tunes from the Songfellows, who came to WHO from Chicago NBC, are clicking cash registers for Grain Belt Beer. They cost $400 per week, but the tremendous audience that can tune them in on WHO more than justifies the cost. Evening, three quarter hours weekly.

GINGHAM GIRL—Organ, harp, violin and soprano soloist provide a pleasing yet economical program that is doing an effective sales job for Gingham Girl Flour. Daytime, two quarter hours weekly.

CHEVROLET—"Guardians of the Highway," a dramatic broadcast, written and produced by the WHO program department, has just finished a thirteen-week series for Chevrolet. Daytime, five quarter hours weekly.

KELLOGG PRODUCTS—Since last September, Gene & Glenn broadcasts have originated at WHO. Wholesale grocers report they're doing a sweet sales job for Kellogg. Daytime, six half hours weekly.

The programs mentioned and pictured above do not include any orchestra-and-soloist shows, of which several are running on WHO, including: Barnsdall's "The Old and the New"—Mid-Continent's "Rocking Chair Melodies"—and Des Moines Drug Company's "Hour of Smiles."

We repeat—in studios, production staff and talent, WHO is in position to produce any type of show required by the advertiser. In broad station coverage and listener-loyalty, WHO is in position to make each show pay the advertiser a substantial profit in sales.

CENTRAL BROADCASTING CO., Des Moines
J. O. Maland, Mgr. Phone 3-7147

The Central Station—WHO—Des Moines

ESSENTIAL TO COMPLETE RADIO COVERAGE OF IOWA OR THE MID-WEST

CLEARED-CHANNEL—50,000 WATTS—FULL-TIME

National Representatives: FREE & SLEININGER, Inc.—New York, Detroit, Chicago, Los Angeles, San Francisco

Know WLS What WE DID THE

New

RECORDS
Month after Month

JANUARY

Mail: 216,627 letters—third biggest mail month in WLS history. 50,133 responses from Chicago alone.

Advertising: 10% increase over corresponding month in 1935.

FEBRUARY

Mail: 264,231 letters — all-time WLS mail record for single month. 95,810 letters in one week (single-week record).

Advertising: 42% increase over February, 1935.

MARCH

Mail: 196,545 letters — all-time March response record. 37% above March, 1935.

Advertising: Nine advertisers (spot) renewed or increased schedules during month.

APRIL

Mail: 153,466 letters — all-time April record. 210% above the corresponding month in 1935.

Advertising: 20% increase over April 1935. 81% of advertisers (spot) had used WLS on previous schedules.

MAY

Mail: 108,319 letters — all-time record for May. The first time the May total has exceeded the 100,000 mark.

Advertising: 56% increase over May, 1935. Eight advertisers (spot) renewed schedules.

JUNE

Mail: (Incomplete) Nearly 100% over corresponding period in 1935. Looks like another all-time mail record.

Advertising: (Incomplete) Already far ahead of June, 1935. Summer business heaviest in station's history.

ADVERTISING RESULTS follow listener interest! This simple advertising truth never was shown more convincingly than during the first half of 1936. In this period WLS listener interest was greater than ever before. Listener response far exceeded previous records. For example:

- **966,094 letters received at the station (to June 13th) . . . 36% above previous corresponding peak period in 1935 . . . 267,940 from Chicago alone.**
- **$21,799.79 contributed by 6,900 listeners and 865 organizations for Red Cross Flood Relief.**
- **67,319 ballots mailed to station in one week on Chicago time-ordinance question.**
- **56,000 copies of 1936 WLS Family Album and 29,000 copies of new WLS song book purchased by listeners.**
- **87,144 paid-in-advance subscriptions to Stand By (WLS-Prairie Farmer Weekly) Magazine.**
- **Continued capacity audiences at WLS National Barn Dance (479,362 paid admissions in 224 consecutive weeks).**
- **WLS artists and programs among leaders in three of eleven classifications of Radio Guide's Third Annual Nationwide Popularity Poll.**

And advertising results followed apace. For example:

- **18% increase in advertising revenue over corresponding period in 1935.**
- **Average of eight renewals or schedule increases per month.**
- **186,632 letters received by spot-station food advertisers (95% with proof of purchase).**
- **Summer business heaviest in station's history.**
- **Almost complete time sell-out for Fall.**

That's proof of a good half-year—with an even better one to follow. And that's reason for you to consider WLS for your summer and fall advertising. Count on WLS for results!

THE PRAIRIE FARMER STATION
CHICAGO, ILLINOIS

Burridge D. Butler, President **Glenn Snyder, Manager**

National Representatives: John Blair and Co.

XUM

FIRST HALF OF 1936!

The WLS National Barn Dance was 4th among all musical programs on the air in Radio Guide's Annual Popularity Poll. Only Show Boat, Hit Parade and Hollywood Hotel were ahead. And Lulu Belle, exclusive WLS artist, was 5th in the Star of Stars group, surpassed only by Jack Benny, Eddie Cantor, Nelson Eddy and Lanny Ross.

Julian Bentley, WLS News Reporter, ranked 6th in the News Commentator division of the Poll. Only Lowell Thomas, Boake Carter, Walter Winchell, Edwin C. Hill and Jimmy Fidler were ahead. Bentley is exclusively on WLS.

WLS FAMILY ALBUM

Complimentary Copies to Advertisers

Nearly 100 large-sized photographs of WLS artists, staff members and scenes are contained in the 1936 WLS Family Album. 56,000 listeners already have purchased this edition—the 7th in an annual series. Write for your copy today!

IN THE PUBLIC INTEREST

The American Red Cross

CHICAGO CHAPTER
615 S. MICHIGAN AVENUE - CHICAGO
TELEPHONE HARRISON 0100
JAMES T. NICHOLSON, MANAGER

April 25, 1936.

My dear Mr. Biggar:

We regret that it is impossible for us to thank by individual letter the many thousands of Prairie Farmer Station WLS listeners who contributed so promptly and so generously to the Red Cross Flood Relief Fund. However, we do hope that many heard James R. Forgan, Chairman of our Board of Directors, express our appreciation during your twelfth anniversary program on Saturday night, April 18th.

The Chicago Chapter, American Red Cross has received through WLS a total of $21,977.79. This fine sum came from at least 6,900 individual listeners and from 663 organizations, including towns, churches and groups within churches, war veterans' groups, farm organizations, women's clubs, lodges, fraternities, city and rural schools and other organizations. It was a wonderful response.

We would be very appreciative if you would, in some way, express the very real gratitude of the American Red Cross to the thousands who helped to raise this fund. All of the money went directly to the areas affected by the floods and tornadoes, covering 120 counties of 18 states, where it helped to enable our Red Cross workers to provide food, shelter, clothing and medical care. Thousands of families must be cared for during many months to come.

We learned to depend upon the "WLS Family" - your staff and your listeners - long ago. Ever since the first radio Red Cross appeal for southern Illinois-Indiana tornado sufferers in March, 1925, you have worked with us in emergencies. Not only do you prove your own neighborliness to those less fortunate, but you inspire many others to help, either through their local Red Cross chapters or our Chicago office.

Again we thank you for what you have done.

Very sincerely yours,

James T. Nicholson

James T. Nicholson
Manager.

Mr. George C. Biggar
Prairie Farmer Station WLS
1230 Washington Blvd.
Chicago, Illinois.

National Convention—Chicago, Illinois—May 11-14, 1936.

Over $400,000 has been contributed through WLS in the past twelve years to alleviate human suffering. The most recent instance is cited above.

(Left) Not all the letters are shown here. Actually 67,319 ballots were received. WLS asked listeners to vote whether they wanted Chicago to operate on year-around Eastern Standard Time.

50,000 Watts
WLS
Clear Channel

XUM

CENSUS OF U. S. RADIO HOMES BY STATES AND COUNTIES

(Continued from page 24)

Louisiana (Cont'd)

La Salle	1,200
Lincoln	1,100
Livingston	1,100
Madison	1,500
Morehouse	2,500
Natchitoches	3,100
Orleans	90,800
Ouachita	8,900
Plaquemines	700
Pointe Coupee	1,500
Rapides	7,900
Red River	1,200
Richland	2,100
Sabine	2,200
St. Bernard	400
St. Charles	900
St. Helena	500
St. James	1,100
St. John the Baptist	1,100
St. Landry	5,100
St. Martin	1,700
St. Mary	2,800
St. Tammany	2,200
Tangipahoa	4,300
Tensas	1,300
Terrebonne	2,900
Union	1,500
Vermilion	2,600
Vernon	1,600
Washington	3,400
Webster	2,600
West Baton Rouge	800
West Carroll	1,000
West Feliciana	800
Winn	1,300

Maine

Total Radio Homes: 163,600

Androscoggin	16,600
Aroostook	14,600
Cumberland	30,300
Franklin	4,000
Hancock	7,000
Kennebec	15,500
Knox	6,600
Lincoln	3,200
Oxford	7,600
Penobscot	20,000
Piscataquis	3,300
Sagadahoc	3,800
Somerset	6,700
Waldo	3,800
Washington	6,400
York	14,200

Maryland

Total Radio Homes: 320,000

Allegany	13,300
Anne Arundel	8,500
Baltimore	211,300
Baltimore City, Included in Baltimore County	
Calvert	1,300
Caroline	2,400
Carroll	5,600
Cecil	4,000
Charles	1,600
Dorchester	3,400
Frederick	8,300
Garrett	2,000
Harford	5,200
Howard	2,200
Kent	2,200
Montgomery	11,100
Prince Georges	9,400
Queen Annes	1,600
St. Marys	1,500
Somerset	2,400
Talbot	3,100
Washington	10,900
Wicomico	5,500
Worcester	3,200

Massachusetts

Total Radio Homes: 946,900

Barnstable	8,700
Berkshire	27,300
Bristol	73,700
Dukes	1,300
Essex	117,900
Franklin	11,800
Hampden	80,000
Hampshire	15,800
Middlesex	203,200
Nantucket	1,000
Norfolk	68,800
Plymouth	40,900
Suffolk	190,900
Worcester	105,600

Michigan

Total Radio Homes: 936,600

Alcona	500
Alger	1,400
Allegan	5,400
Alpena	3,700
Antrim	1,300
Arenac	1,000
Baraga	1,100
Barry	3,500
Bay	12,400
Benzie	1,100
Berrien	16,200
Branch	4,200
Calhoun	18,700

Michigan (Cont'd)

Cass	3,000
Charlevoix	2,100
Cheboygan	2,000
Chippewa	4,700
Clare	1,100
Clinton	3,400
Crawford	700
Delta	6,000
Dickinson	4,200
Eaton	5,100
Emmet	3,200
Genesee	39,900
Gladwin	900
Gogebic	5,500
Grand Traverse	4,500
Gratiot	4,600
Hillsdale	5,300
Houghton	8,200
Huron	5,400
Ingham	26,100
Ionia	4,900
Iosco	1,200
Iron	3,000
Isabella	3,600
Jackson	17,300
Kalamazoo	21,900
Kalkaska	500
Kent	51,800
Keweenaw	400
Lake	400
Lapeer	4,200
Leelanau	900
Lenawee	10,200
Livingston	3,400
Luce	1,000
Mackinac	1,300
Macomb	12,400
Manistee	3,000
Marquette	8,300
Mason	3,400
Mecosta	2,300
Menominee	3,800
Midland	3,200
Missaukee	1,000
Monroe	8,100
Montcalm	4,100
Montmorency	300
Muskegon	16,500
Newaygo	2,500
Oakland	34,200
Oceana	2,000
Ogemaw	1,300
Ontonagon	1,300
Osceola	1,900
Oscoda	200
Otsego	800
Ottawa	10,200
Presque Isle	1,300
Roscommon	300
Saginaw	22,000
St. Clair	13,600
St. Joseph	5,100
Sanilac	3,700
Schoolcraft	1,600
Shiawassee	6,600
Tuscola	5,200
Van Buren	5,200
Washtenaw	17,000
Wayne	398,300
Wexford	2,800

Minnesota

Total Radio Homes: 535,600

Aitkin	2,900
Anoka	3,100
Becker	3,600
Beltrami	4,000
Benton	14,100
(Includes Sherburne and Stearns)	
Big Stone	2,000
Blue Earth	8,300
Brown	5,500
Carlton	3,800
Carver	3,200
Cass	2,800
Chippewa	3,400
Chisago	2,700
Clay	5,100
Clearwater	1,400
Cook	500
Cottonwood	2,800
Crow Wing	5,500
Dakota	5,900
Dodge	2,200
Douglas	3,800
Faribault	5,100
Fillmore	5,800
Freeborn	6,100
Goodhue	7,600
Grant	2,000
Hennepin	122,300
Houston	2,900
Hubbard	1,500
Isanti	2,400
Itasca	5,100
Jackson	3,000
Kanabec	1,400
Kandiyohi	4,700
Kittson	1,800
Koochiching	2,400
Lac qui Parle	2,400
Lake	1,600
Lake of the Woods	700
Le Sueur	3,500

Minnesota (Cont'd)

Lincoln	1,600
Lyon	4,400
McLeod	4,300
Mahnomen	700
Marshall	3,000
Martin	5,200
Meeker	3,300
Mille Lacs	3,200
Morrison	4,100
Mower	6,700
Murray	2,100
Nicollet	2,600
Nobles	4,100
Norman	2,500
Olmsted	7,900
Otter Tail	9,700
Pennington	2,300
Pine	3,400
Pipestone	2,800
Polk	7,300
Pope	2,400
Ramsey	65,200
Red Lake	1,100
Redwood	4,200
Renville	4,400
Rice	5,900
Rock	2,000
Roseau	2,200
St. Louis	41,500
Scott	3,000
Sherburne (Incl. in Benton)	
Sibley	2,700
Stearns (Incl. in Benton)	
Steele	4,400
Stevens	1,900
Swift	2,800
Todd	4,700
Traverse	1,500
Wabasha	4,000
Wadena	2,500
Waseca	3,000
Washington	5,100
Watonwan	3,000
Wilkin	1,500
Winona	8,800
Wright	5,100
Yellow Medicine	2,600

Mississippi

Total Radio Homes: 166,400

Adams	2,700
Alcorn	2,100
Amite	1,000
Attala	2,000
Benton	500
Bolivar	5,300
Calhoun	1,000
Carroll	1,100
Chickasaw	1,500
Choctaw	700
Claiborne	900
Clarke	1,300
Clay	1,500
Coahoma	4,700
Copiah	2,900
Covington	1,000
De Soto	1,600
Forrest	3,900
Franklin	700
George	600
Greene	600
Grenada	1,400
Hancock	900
Harrison	5,400
Hinds	13,000
Holmes	3,000
Humphreys	1,600
Issaquena	300
Itawamba	900
Jackson	1,500
Jasper	1,000
Jefferson	900
Jefferson Davis	900
Jones	4,500
Kemper	1,100
Lafayette	1,600
Lamar	700
Lauderdale	6,800
Lawrence	800
Leake	1,100
Lee	3,400
Leflore	4,700
Lincoln	2,300
Lowndes	2,800
Madison	2,300
Marion	1,600
Marshall	1,600
Monroe	3,000
Montgomery	1,200
Neshoba	1,700
Newton	1,500
Noxubee	1,700
Oktibbeha	1,800
Panola	2,200
Pearl River	1,500
Perry	500
Pike	3,200
Pontotoc	1,300
Prentiss	1,400
Quitman	1,500
Rankin	1,200
Scott	1,600
Sharkey	1,100
Simpson	1,300
Smith	1,000
Stone	500

Mississippi (Cont'd)

Sunflower	4,700
Tallahatchie	2,100
Tate	1,200
Tippah	1,200
Tishomingo	1,000
Tunica	1,500
Union	1,600
Walthall	1,100
Warren	4,500
Washington	6,100
Wayne	1,000
Webster	700
Wilkinson	1,000
Winston	1,500
Yalabusha	1,400
Yazoo	2,900

Missouri

Total Radio Homes: 708,500

Adair	3,900
Andrew	2,200
Atchison	2,400
Audrain	4,100
Barry	2,900
Barton	2,200
Bates	3,500
Benton	1,600
Bollinger	900
Boone	7,300
Buchanan	22,800
Butler	3,500
Caldwell	2,500
Callaway	3,300
Camden	700
Cape Girardeau	7,000
Carroll	3,900
Carter	400
Cass	3,700
Cedar	1,800
Chariton	3,300
Christian	1,700
Clark	1,600
Clay	5,800
Clinton	2,500
Cole	5,500
Cooper	3,500
Crawford	1,600
Dade	1,500
Dallas	1,000
Daviess	2,200
DeKalb	1,800
Dent	1,300
Douglas	1,100
Dunklin	4,200
Franklin	6,100
Gasconade	1,900
Gentry	2,800
Greene	18,500
Grundy	2,800
Harrison	2,900
Henry	5,900
Hickory	700
Holt	2,300
Howard	2,200
Howell	2,500
Iron	1,100
Jackson	121,000
Jasper	15,200
Jefferson	3,800
Johnson	4,300
Knox	1,500
Laclede	2,200
Lafayette	5,500
Lawrence	3,100
Lewis	2,400
Lincoln	2,700
Linn	5,000
Livingston	3,300
McDonald	1,700
Macon	3,900
Madison	1,000
Maries	700
Marion	6,900
Mercer	1,000
Miller	2,100
Mississippi	1,900
Moniteau	2,200
Monroe	2,900
Montgomery	2,500
Morgan	1,600
New Madrid	2,600
Newton	3,100
Nodaway	5,400
Oregon	1,200
Osage	1,400
Ozark	700
Pemiscot	3,900
Perry	2,300
Pettis	6,900
Phelps	2,500
Pike	3,300
Platte	1,900
Polk	2,700
Pulaski	1,500
Putnam	1,500
Ralls	1,600
Randolph	5,300
Ray	3,000
Reynolds	600
Ripley	1,000
St. Charles	4,100
St. Clair	1,400
St. Francois	4,700
St. Louis	240,200
St. Louis City (Incl. in St. Louis County)	

Missouri (Cont'd)

Ste. Genevieve	1,500
Saline	5,400
Schuyler	1,100
Scotland	1,600
Scott	3,200
Shannon	700
Shelby	2,600
Stoddard	2,900
Stone	1,000
Sullivan	2,100
Taney	800
Texas	1,700
Vernon	4,600
Warren	1,500
Washington	1,200
Wayne	1,000
Webster	2,400
Worth	1,300
Wright	1,800

Montana

Total Radio Homes: 91,700

Beaverhead	1,500
Big Horn	1,000
Blaine	1,300
Broadwater	400
Carbon	1,500
Carter	400
Cascade	8,700
Chouteau	1,100
Custer	2,400
Daniels	600
Dawson	1,500
Deer Lodge	2,300
Fallon	600
Fergus	2,900
Flathead	3,400
Gallatin	3,500
Garfield	400
Glacier	1,100
Golden Valley	300
Granite	400
Hill	2,400
Jefferson	500
Judith Basin	500
Lake	1,200
Lewis and Clark	4,500
Liberty	300
Lincoln	800
McCone	600
Madison	900
Meagher	300
Mineral	200
Missoula	5,200
Musselshell	800
Park	2,400
Petroleum	300
Phillips	1,000
Pondera	1,000
Powder River	400
Powell	1,000
Prairie	400
Ravalli	1,800
Richland	1,500
Roosevelt	1,600
Rosebud	800
Sanders	700
Sheridan	1,200
Silver Bow	11,500
Stillwater	700
Sweet Grass	600
Teton	800
Toole	1,200
Treasure	200
Valley	1,300
Wheatland	600
Wibaux	300
Yellowstone	6,900
Yellowstone Nat'l Pk. (part)	

Nebraska

Total Radio Homes: 266,800

Adams	6,000
Antelope	2,300
Arthur	120
Banner	210
Blaine	200
Boone	2,600
Box Butte	2,700
Boyd	900
Brown	1,200
Buffalo	5,400
Burt	2,400
Butler	2,500
Cass	3,000
Cedar	2,500
Chase	1,100
Cherry	1,600
Cheyenne	2,100
Clay	2,100
Colfax	2,600
Cuming	2,200
Custer	4,300
Dakota	1,300
Dawes	2,400
Dawson	4,000
Deuel	700
Dixon	1,900
Dodge	5,900
Douglas	53,700
Dundy	800
Fillmore	2,200
Franklin	1,800
Frontier	1,300
Furnas	2,300
Gage	6,100

Nebraska (Cont'd)

Garden	600
Garfield	500
Gosper	600
Grant	240
Greeley	1,200
Hall	6,800
Hamilton	2,200
Harlan	1,300
Hayes	400
Hitchcock	1,300
Holt	2,600
Hooker	200
Howard	1,300
Jefferson	3,200
Johnson	1,300
Kearney	1,600
Keith	1,200
Keyapaha	400
Kimball	800
Knox	2,400
Lancaster	22,300
Lincoln	5,100
Logan	300
Loup	200
McPherson	100
Madison	5,800
Merrick	1,900
Morrill	1,400
Nance	1,400
Nemaha	2,300
Nuckolls	2,100
Otoe	4,100
Pawnee	1,400
Perkins	800
Phelps	2,400
Pierce	1,600
Platte	4,200
Polk	1,900
Redwillow	3,300
Richardson	3,900
Rock	500
Saline	2,900
Sarpy	1,400
Saunders	3,400
Scotts Bluff	6,300
Seward	2,900
Sheridan	1,900
Sherman	1,100
Sioux	400
Stanton	1,100
Thayer	2,500
Thomas	200
Thurston	1,300
Valley	1,700
Washington	1,900
Wayne	2,000
Webster	1,500
Wheeler	230
York	3,900

Nevada

Total Radio Homes: 21,700

Churchill	1,200
Clark	2,400
Douglass	300
Elko	2,300
Esmeralda	400
Eureka	240
Humboldt	900
Lander	400
Lincoln	500
Lyon	800
Mineral	400
Nye	1,200
Ormsby	500
Pershing	600
Storey	168
Washoe	6,900
White Pine	2,500

New Hampshire

Total Radio Homes: 99,700

Belknap	5,100
Carroll	2,800
Cheshire	6,200
Coos	6,900
Grafton	9,700
Hillsborough	30,900
Merrimack	12,900
Rockingham	12,000
Strafford	8,600
Sullivan	4,600

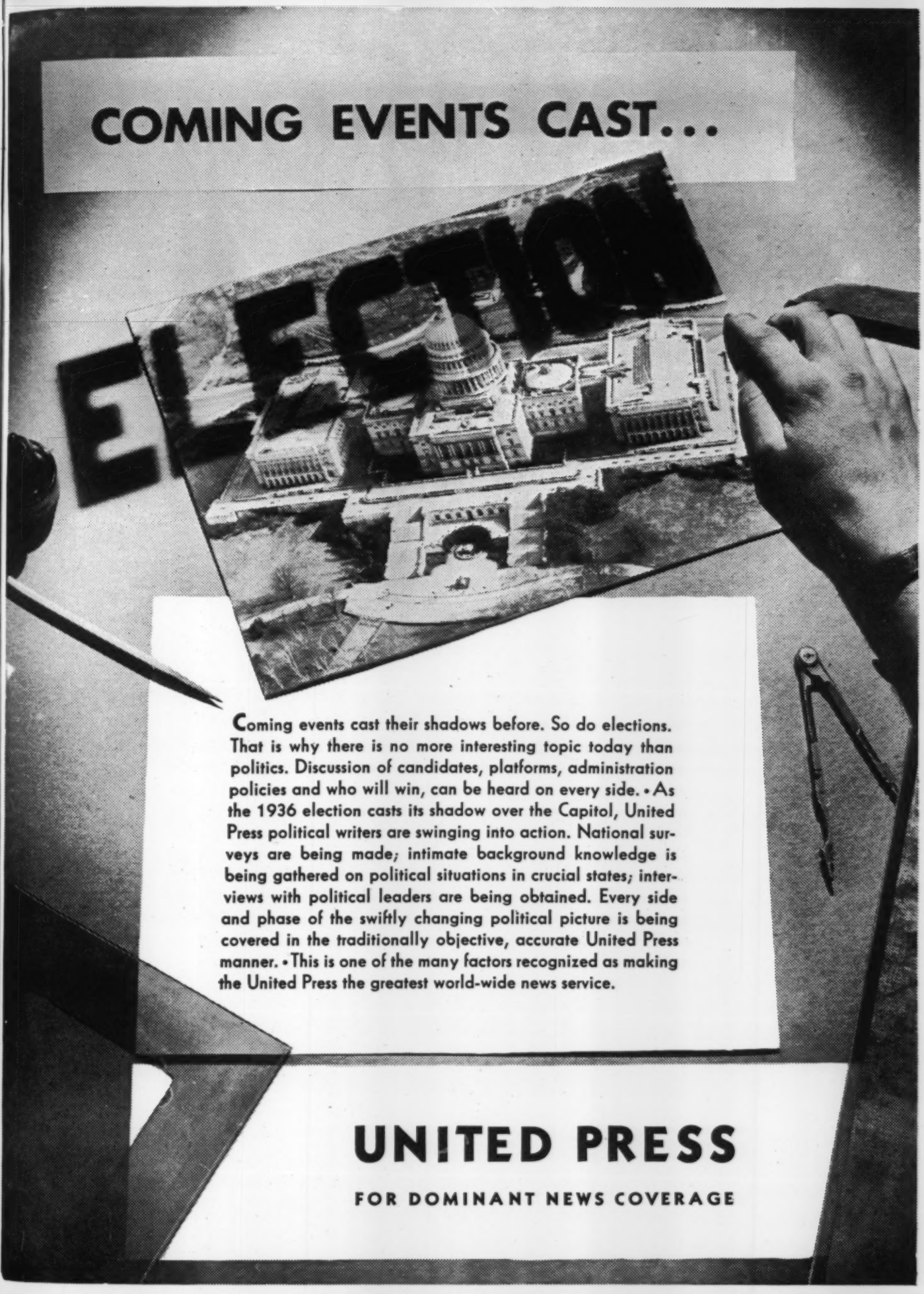
New Jersey

Total Radio Homes: 897,500

Atlantic	30,600
Bergen	88,000
Burlington	17,900
Camden	51,700
Cape May	7,900
Cumberland	17,100
Essex	200,300
Gloucester	13,400
Hudson	137,500
Hunterdon	6,400
Mercer	38,500
Middlesex	43,200
Monmouth	34,600
Morris	25,400
Ocean	9,000
Passaic	67,300
Salem	7,900
Somerset	14,200
Sussex	6,900
Union	71,000
Warren	9,300

(Continued on page 33)

COMING EVENTS CAST...



Coming events cast their shadows before. So do elections. That is why there is no more interesting topic today than politics. Discussion of candidates, platforms, administration policies and who will win, can be heard on every side. • As the 1936 election casts its shadow over the Capitol, United Press political writers are swinging into action. National surveys are being made; intimate background knowledge is being gathered on political situations in crucial states; interviews with political leaders are being obtained. Every side and phase of the swiftly changing political picture is being covered in the traditionally objective, accurate United Press manner. • This is one of the many factors recognized as making the United Press the greatest world-wide news service.

UNITED PRESS

FOR DOMINANT NEWS COVERAGE

DO YOU AGRE

STATIONS will develop the most from their possibilities in national spot business if they employ a national representative who:

1. Values above all else the respect and confidence of recognized, progressive advertising agencies.

2. Gives prompt and dependable information to be worthy of this respect and confidence.

3. Sells effectively without exaggeration or high pressure.

4. Employs only men with experience of ten or more successful years in selling national advertising.

5. Has enough resources, offices and men to sell radio time effectively to national advertisers throughout the country, and obtain first information about new radio prospects.

6. Directs its entire energy to selling radio time, and is not dominated by the demands of competing media.

7. Reports to stations not only on business they will get, but in advance on orders that are slated for a competitor.

PAUL H. RAYE

Radio Stati Rep

NEW YORK
366 Madison Ave.
Murray Hill 2-8690

CHICAGO
Tribune Tower
Superior 4473

RE WITH THIS?

8. Sells each station individually as a unit, not just as part of a list.

9. Has held consistently to the same policies, without reorganization, refinancing or frequent change of men, over a period of years.

10. Has firmly established a proven record of success.

These are the essential qualities which have accounted for the steady growth and development of this company. We may fall short of one or another from time to time, but are constantly working with these qualities in mind.

* * *

We consider that our obligation to our stations is a many-sided one requiring more than just the selling of time. It involves a willingness on our part to accept responsibilities, to offer constructive suggestions in the matter of national sales policies, and in general to consider ourselves as added to each station's organization rather than the station as "added to our list." We believe that these characteristics make for representation in the fullest sense of the word . . . representation that gets a maximum of results for the seventeen important stations with which we are associated.

YER COMPANY

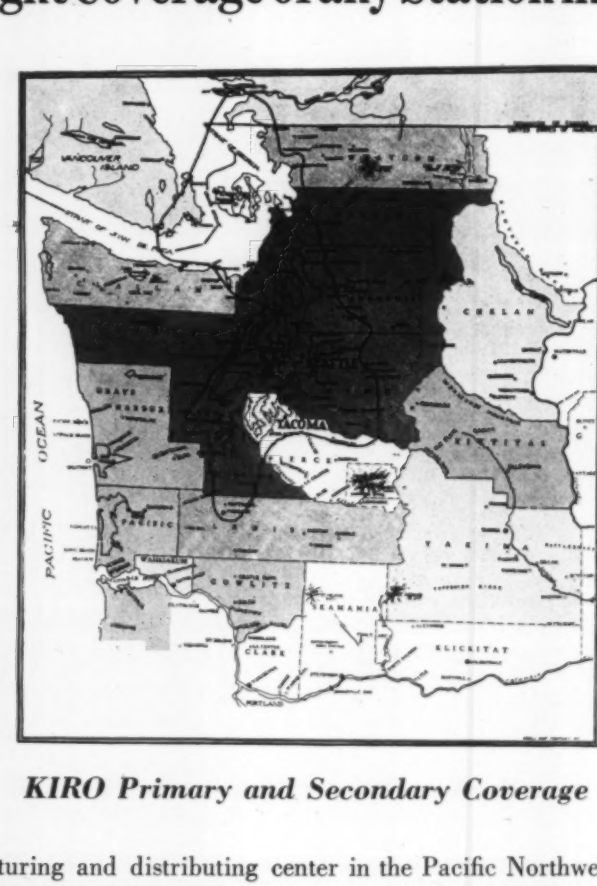
iRepresentatives

DETROIT
General Motors Bldg.
Trinity 2-8060

SAN FRANCISCO
Russ Building
Douglas 1294

Greatest Day and Night Coverage of any Station in Western Washington

Mail Returns from King County: 32.28 Letters per 1000 Radio Homes



KIRO Primary and Secondary Coverage

The Preferred Radio Station of the 400,000 People who live in Seattle!

Seattle is the leading manufacturing and distributing center in the Pacific Northwest. It stands second in percentage of home ownership among all American cities over 300,000 in population. Tacoma, thirty miles southwest of Seattle, is the second important city within the primary listening area of KIRO. Because of its independence from network obligations, KIRO is the only major station in the Puget Sound area that can maintain regular schedules of time on the air for commercial and sustaining programs.

● CASE HISTORY — Diesel Engineering Schools

Original contract consisting of two daytime announcements per day, made for one month—Renewed for second month and at expiration of second month renewed for one year. Sales resulting from KIRO inquiries were approximately 5% of the cost of local newspaper.

5 Minute News Periods Open for Sponsorship

KIRO has spotted INS news periods in five-minute bulletins, hourly on the half hour, from 7:30 to 7:35 A. M. to 5:30 to 5:35 P. M., daily except Sunday. The news is rewritten and broadcast by Peter Mertens, KIRO's news announcer.

Approximately half of the periods are now sold.

For costs and details and periods available for sponsorship, call John Blair Company.

● CASE HISTORY — A Hand Lotion

Original contract for 3 months — Bought a one-minute announcement per day, seven days per week — Offer of a free sample to anyone writing in for one — Drew inquiries at one of the lowest costs of any station used by this sponsor.

GREATEST COVERAGE OF ANY STATION IN WESTERN WASHINGTON

1,000 WATTS **KIRO** 710 KILOCYCLES

QUEEN CITY BROADCASTING CO., INC. COBB BLDG., SEATTLE, WASH.

National Representatives: John Blair & Co. • New York • Chicago • Detroit • San Francisco

CENSUS OF U. S RADIO HOMES BY STATES AND COUNTIES

(Continued from page 28)

New Mexico

Total Radio Homes: 48,300

Bernalillo	9,100
Catron	200
Chaves	2,900
Colfax	2,300
Curry	2,100
De Baca	300
Dona Ana	2,400
Eddy	2,300
Grant	2,100
Guadalupe	600
Harding	300
Hidalgo	600
Lea	800
Lincoln	800
Luna	900
McKinley	2,500
Mora	600
Otero	1,000
Quay	1,300
Rio Arriba	1,200
Roosevelt	1,100
Sandoval	600
San Juan	1,200
San Miguel	2,600
Santa Fe	2,800
Sierra	500
Socorro	900
Taos	1,000
Torrance	800
Union	1,100
Valencia	1,400

New York

Total Radio Homes: 2,993,100

Albany	53,500
Allegany	7,900
Bronx	317,000
Broome	34,900
Cattaraugus	17,500
Cayuga	16,400
Chautauqua	30,500
Chemung	18,100
Chenango	8,000
Clinton	9,800
Columbia	10,400
Cortland	8,300
Delaware	9,200
Dutchess	23,400
Erie	178,200
Essex	7,200
Franklin	9,900
Fulton	12,700
Genesee	9,900
Greene	6,000
Hamilton	800
Harkimer	13,600
Jefferson	20,700
Kings	608,000
Lewis	4,300
Livingston	7,900
Madison	9,600
Monroe	103,500
Montgomery	13,500
Nassau	72,700
New York	427,000
Niagara	33,300
Oneida	45 300
Onondaga	71,200
Ontario	12,400
Orange	31,300
Orleans	5,300
Oswego	15,700
Otsego	12,000
Putnam	3,300
Queens	276,000
Rensselaer	30,700
Richmond	35,000
Rockland	12,900
St. Lawrence	17,800
Saratoga	14,500
Schenectady	30,800
Schoharie	4,500
Schuyler	2,600
Seneca	5,100
Steuben	19,700
Suffolk	36,900
Sullivan	8,900
Tioga	6,100
Tompkins	11,000
Ulster	20,500
Warren	8,900
Washington	9,200
Wayne	11,200
Westchester	120,400
Wyoming	6,300
Yates	3,900

North Carolina

Total Radio Homes: 341,800

Alamance	6,100
Alexander	900
Alleghany	500
Anson	2,300
Ashe	1,200
Avery	700
Beaufort	3,800
Bertie	1,700
Bladen	1,500
Brunswick	800
Buncombe	15,200
Burke	2,700
Cabarrus	5,400
Caldwell	2,700
Camden	300

No. Carolina (Cont'd)

Carteret	1,700
Caswell	900
Catawba	4,900
Chatham	1,700
Cherokee	1,100
Chowan	1,100
Clay	400
Cleveland	5,000
Columbus	3,000
Craven	3,500
Cumberland	5,200
Currituck	400
Dare	500
Davidson	5,100
Davie	1,000
Duplin	2,500
Durham	11,900
Edgecombe	5,400
Forsyth	15,200
Franklin	2,000
Gaston	8,700
Gates	600
Graham	300
Granville	2,400
Greene	1,100
Guilford	22,300
Halifax	5,100
Harnett	3,400
Haywood	2,900
Henderson	2,700
Hertford	1,300
Hoke	1,000
Hyde	500
Iredell	4,500
Jackson	1,300
Johnston	4,400
Jones	600
Lee	1,700
Lenoir	4,600
Lincoln	2,100
McDowell	1,900
Macon	1,000
Madison	1,300
Martin	2,400
Mecklenburg	24,600
Mitchell	1,100
Montgomery	1,500
Moore	3,000
Nash	4,900
New Hanover	7,400
Northampton	1,800
Onslow	900
Orange	1,900
Pamlico	600
Pasquotank	2,800
Pender	900
Perquimans	700
Person	1,500
Pitt	6,300
Polk	1,000
Randolph	3,000
Richmond	3,600
Robeson	6,200
Rockingham	5,500
Rowan	7,600
Rutherford	3,600
Sampson	2,800
Scotland	1,800
Stanly	3,200
Stokes	1,100
Surry	3,700
Swain	800
Transylvania	900
Tyrell	300
Union	3,400
Vance	3,200
Wake	14,500
Warren	1,700
Washington	1,100
Watauga	1,100
Wayne	5,800
Wilkes	2,700
Wilson	5,200
Yadkin	900
Yancey	800

North Dakota

Total Radio Homes: 100,500

Adams	1,000
Barnes	3,400
Benson	1,500
Billings	200
Bottineau	1,800
Bowman	900
Burke	1,200
Burleigh	3,100
Cass	8,900
Cavalier	1,400
Dickey	1,600
Divide	1,300
Dunn	900
Eddy	1,000
Emmons	1,200
Foster	1,200
Golden Valley	600
Grand Forks	6,900
Grant	800
Griggs	900
Hettinger	1,400
Kidder	700
La Moure	1,600
Logan	700
McHenry	1,900
McIntosh	800
McKenzie	900
McLean	2,000

No. Dakota (Cont'd)

Mercer	1,000
Morton	3,600
Mountrail	1,700
Nelson	1,500
Oliver	400
Pembina	2,000
Pierce	1,100
Ramsey	3,300
Ransom	1,600
Renville	1,000
Richland	3,400
Rolette	1,100
Sargent	1,100
Sheridan	800
Sioux	400
Slope	500
Stark	2,700
Steele	700
Stutsman	4,100
Towner	1,000
Traill	2,300
Walsh	3,200
Ward	7,100
Wells	1,700
Williams	3,400

Ohio

Total Radio Homes: 1,396,900

Adams	2,300
Allen	17,000
Ashland	7,000
Ashtabula	14,900
Athens	8,400
Auglaize	5,600
Belmont	18,000
Brown	3,200
Butler	24,200
Carroll	2,000
Champaign	4,600
Clark	18,100
Clermont	5,600
Clinton	4,800
Columbiana	18,000
Coshocton	5,000
Crawford	7,600
Cuyahoga	272,200
Darke	6,400
Defiance	4,500
Delaware	4,600
Erie	9,700
Fairfield	8,100
Fayette	3,700
Franklin	89,100
Fulton	4,800
Gallia	3,200
Geauga	2,900
Greene	5,800
Guernsey	7,300
Hamilton	141,100
Hancock	7,600
Hardin	5,000
Harrison	2,800
Henry	4,300
Highland	4,700
Hocking	2,800
Holmes	2,300
Huron	8,000
Jackson	3,300
Jefferson	17,400
Knox	5,800
Lake	9,400
Lawrence	6,200
Licking	12,700
Logan	6,100
Lorain	23,500
Lucas	78,200
Madison	3,600
Mahoning	47,000
Marion	9,800
Medina	6,400
Meigs	4,100
Mercer	4,200
Miami	10,100
Monroe	2,400
Montgomery	63,500
Morgan	2,400
Morrow	1,900
Muskingum	13,900
Noble	2,500
Ottawa	4,100
Paulding	2,400
Perry	4,600
Pickaway	4,000
Pike	1,800
Portage	7,500
Preble	3,800
Putnam	4,400
Richland	14,000
Ross	8,700
Sandusky	8,200
Scioto	14,800
Seneca	9,400
Shelby	4,500
Stark	46,200
Summit	76,900
Trumbull	21,700
Tuscarawas	12,000
Union	2,900
Van Wert	4,800
Vinton	1,000
Warren	3,900
Washington	7,800
Wayne	10,000
Williams	5,200
Wood	7,100
Wyandot	3,600

Oklahoma

Total Radio Homes: 335,000

Adair	1,100
Alfalfa	2,300
Atoka	1,100
Beaver	1,000
Beckham	3,900
Blaine	2,700
Bryan	3,600
Caddo	5,800
Canadian	4,200
Carter	6,800
Cherokee	1,400
Choctaw	2,200
Cimarron	600
Cleveland	3,700
Coal	1,100
Comanche	5,400
Cotton	1,900
Craig	2,000
Creek	8,200
Custer	4,200
Delaware	800
Dewey	1,500
Ellis	1,200
Garfield	9,800
Garvin	3,300
Grady	6,500
Grant	2,300
Greer	2,300
Harmon	1,600
Harper	1,000
Haskell	1,300
Hughes	3,100
Jackson	4,000
Jefferson	2,000
Johnston	1,100
Kay	9,200
Kingfisher	2,300
Kiowa	4,100
Latimer	900
Le Flore	3,600
Lincoln	3,800
Logan	4,100
Love	900
McClain	1,800
McCurtain	2,900
McIntosh	1,900
Major	1,500
Marshall	1,100
Mayes	1,500
Murray	1,400
Muskogee	10,100
Noble	2,100
Nowata	1,500
Okfuskee	2,600
Oklahoma	50,100
Okmulgee	7,400
Osage	5,600
Ottawa	4,100
Pawnee	2,200
Payne	5,600
Pittsburg	5,400
Pontotoc	3,800
Pottawatomie	7,900
Pushmataha	1,100
Roger Mills	1,200
Rogers	2,200
Seminole	7,300
Sequoyah	1,400
Stephens	4,100
Texas	1,600
Tillman	3,500
Tulsa	43,400
Wagoner	1,700
Washington	5,000
Washita	3,200
Woods	2,800
Woodward	2,100

Oregon

Total Radio Homes: 216,400

Baker	3,700
Benton	3,600
Clackamas	8,100
Clatsop	5,200
Columbia	2,800
Coos	5,800
Crook	600
Curry	500
Deschutes	3,400
Douglas	4,500
Gilliam	800
Grant	800
Harney	1,000
Hood River	2,100
Jackson	7,600
Jefferson	300
Josephine	2,500
Klamath	7,400
Lake	1,100
Lane	11,700
Lincoln	1,600
Linn	4,800
Malheur	2,000
Marion	13,300
Morrow	900
Multnomah	91,400
Polk	2,400
Sherman	600
Tillamook	2,100
Umatilla	5,400
Union	3,800
Wallowa	1,300

Oregon (Cont'd)

Wasco	3,300
Washington	5,000
Wheeler	500
Yamhill	4,500

Pennsylvania

Total Radio Homes: 1,933,400

Adams	5,500
Allegheny	301,600
Armstrong	11,600
Beaver	26,100
Bedford	5,000
Berks	54,100
Blair	28,200
Bradford	11,800
Bucks	18,000
Butler	15,400
Cambria	33,200
Cameron	1,100
Carbon	9,700
Centre	9,400
Chester	26,500
Clarion	6,100
Clearfield	12,800
Clinton	5,800
Columbia	8,000
Crawford	12,400
Cumberland	12,100
Dauphin	40,700
Delaware	62,500
Elk	5,200
Erie	38,200
Fayette	28,200
Forest	700
Franklin	10,600
Fulton	800
Greene	6,300
Huntingdon	6,200
Indiana	11,400
Jefferson	9,000
Juniata	1,700
Lackawanna	65,200
Lancaster	43,200
Lawrence	18,700
Lebanon	12,400
Lehigh	34,400
Luzerne	87,300
Lycoming	20,300
McKean	13,000
Mercer	17,700
Mifflin	6,500
Monroe	6,900
Montgomery	60,000
Montour	1,900
Northampton	38,600
Northumberland	19,600
Perry	3,200
Philadelphia	430,300
Pike	1,300
Potter	3,500
Schuylkill	40,600
Snyder	2,300
Somerset	10,700
Sullivan	1,000
Susquehanna	5,600
Tioga	7,000
Union	3,000
Venango	13,000
Warren	9,400
Washington	35,400
Wayne	6,400
Westmoreland	46,500
Wyoming	3,100
York	34,500

Rhode Island

Total Radio Homes: 150,000

Bristol	3,900
Kent	8,400
Newport	9,800
Providence	120,700
Washington	7,200

South Carolina

Total Radio Homes: 174,600

Abbeville	1,800
Aiken	4,300
Allendale	900
Anderson	8,400
Bamberg	1,600
Barnwell	1,600
Beaufort	1,600
Berkeley	1,300
Calhoun	1,100
Charleston	15,600
Cherokee	2,800
Chester	3,100
Chesterfield	2,700
Clarendon	1,800
Colleton	1,900
Darlington	4,300
Dillon	2,000
Dorchester	1,400
Edgefield	1,400
Fairfield	1,700
Florence	6,800
Georgetown	1,800
Greenville	17,300
Greenwood	4,300
Hampton	1,300
Horry	3,300
Jasper	700
Kershaw	2,700

So. Carolina (Cont'd)

Lancaster	2,600
Laurens	3,800
Lee	1,700
Lexington	2,900
McCormick	700
Marion	2,500
Marlboro	2,800
Newberry	3,300
Oconee	3,000
Orangeburg	4,900
Pickens	2,900
Richland	14,100
Saluda	1,200
Spartanburg	13,100
Sumter	4,900
Union	3,000
Williamsburg	2,200
York	5,500

South Dakota

Total Radio Homes: 107,000

Armstrong	10
Aurora	1,100
Beadle	4,100
Bennett	400
Bon Homme	1,600
Brookings	2,900
Brown	6,100
Brule	1,100
Buffalo	150
Butte	1,400
Campbell	500
Charles Mix	2,300
Clark	1,500
Clay	1,500
Codington	3,800
Corson	700
Custer	700
Davison	3,700
Day	1,700
Deuel	1,000
Dewey	600
Douglas	1,000
Edmunds	1,000
Fall River	1,400
Faulk	1,000
Grant	1,400
Gregory	1,500
Haakon	700
Hamlin	900
Hand	1,200
Hanson	900
Harding	400
Hughes	1,600
Hutchinson	1,800
Hyde	500
Jackson	300
Jerauld	900
Jones	400
Kingsbury	1,700
Lake	2,200
Lawrence	2,700
Lincoln	1,800
Lyman	700
McCook	1,400
McPherson	1,000
Marshall	1,100
Meade	1,500
Mellette	400
Miner	1,100
Minnehaha	11,300
Moody	1,300
Pennington	4,600
Perkins	1,300
Potter	800
Roberts	2,300
Sanborn	1,000
Shannon	300
Spink	2,500
Stanley	400
Sully	500
Todd	900
Tripp	2,200
Turner	2,200
Union	1,700
Walworth	1,300
Washabaugh	140
Washington	100
Yankton	2,500
Ziebach	300

Tennessee

Total Radio Homes: 323,900

Anderson	1,800
Bedford	2,100
Benton	800
Bledsoe	500
Blount	2,700
Bradley	2,700
Campbell	2,300
Cannon	800
Carroll	2,800
Carter	2,900
Cheatham	600
Chester	900
Claiborne	1,500
Clay	500
Cocke	1,500
Coffee	1,700
Crockett	1,600
Cumberland	900
Davidson	47,300
Decatur	800
De Kalb	1,200
Dickson	1,600

(Continued on page 34)

CENSUS OF U. S. RADIO HOMES BY STATES AND COUNTIES

(Continued from page 33)

Tennessee (Cont'd)

Dyer	3,800
Fayette	1,800
Fentress	800
Franklin	2,300
Gibson	5,200
Giles	2,100
Grainger	700
Greene	2,900
Grundy	700
Hamblen	1,800
Hamilton	28,300
Hancock	500
Hardeman	1,700
Hardin	1,100
Hawkins	1,700
Haywood	2,300
Henderson	1,600
Henry	2,800
Hickman	900
Houston	400
Humphreys	900
Jackson	900
Jefferson	1,300
Johnson	900
Knox	25,300
Lake	1,000
Lauderdale	2,300
Lawrence	2,200
Lewis	400
Lincoln	2,600
Loudon	1,600
McMinn	2,900
McNairy	1,600
Macon	1,200
Madison	6,800
Marion	1,600
Marshall	1,600
Maury	4,100
Meigs	300
Monroe	1,700
Montgomery	3,700
Moore	300
Morgan	1,000
Obion	3,400
Overton	1,100
Perry	500
Pickett	300
Polk	1,400
Putnam	2,300
Rhea	1,200
Roane	2,400
Robertson	2,800
Rutherford	3,800
Scott	1,000
Sequatchie	300
Sevier	1,400
Shelby	61,400
Smith	1,500
Stewart	900
Sullivan	8,000
Sumner	2,700
Tipton	2,400
Trousdale	600
Unicoi	1,300
Union	600
Van Buren	200
Warren	1,900
Washington	5,900
Wayne	1,000
Weakley	3,400
White	1,300
Williamson	2,100
Wilson	2,700

Texas

Total Radio Homes: 862,100

Anderson	4,300
Andrews	50
Angelina	3,400
Aransas	200
Archer	900
Armstrong	400
Atascosa	1,400
Austin	2,500
Bailey	500
Bandera	400
Bastrop	2,200
Baylor	1,000
Bee	2,000
Bell	6,300
Bexar	58,200
Blanco	400
Borden	70
Bosque	1,700
Bowie	4,500
Brazoria	2,500
Brazos	3,400
Brewster	900
Briscoe	500
Brooks	600
Brown	3,900
Burleson	1,600
Burnet	1,300
Caldwell	3,500
Calhoun	600
Callahan	1,200
Cameron	9,500
Camp	1,000
Carson	1,000
Cass	2,600
Castro	400
Chambers	500
Cherokee	4,200
Childress	2,500
Clay	1,600

Texas (Cont'd)

Cochran	140
Coke	400
Coleman	2,800
Collin	5,100
Collingsworth	1,700
Colorado	2,500
Comal	1,900
Comanche	1,900
Concho	800
Cooke	3,100
Coryell	2,100
Cottle	1,200
Crane	200
Crockett	400
Crosby	1,300
Culberson	300
Dallam	1,300
Dallas	80,400
Dawson	1,400
Deaf Smith	900
Delta	1,400
Denton	4,800
DeWitt	3,700
Dickens	1,200
Dimmit	1,000
Donley	1,200
Duval	900
Eastland	4,000
Ector	600
Edwards	300
Ellis	6,000
El Paso	20,300
Erath	2,600
Falls	3,400
Fannin	4,300
Fayette	3,600
Fisher	1,400
Floyd	1,800
Foard	800
Fort Bend	3,400
Franklin	600
Freestone	2,200
Frio	800
Gaines	300
Galveston	15,200
Garza	800
Gillespie	1,900
Glasscock	100
Goliad	800
Gonzales	2,900
Gray	3,800
Grayson	9,200
Gregg	2,500
Grimes	2,300
Guadalupe	3,100
Hale	3,200
Hall	1,900
Hamilton	1,800
Hansford	400
Hardeman	2,000
Hardin	1,500
Harris	88,300
Harrison	3,900
Hartley	200
Haskell	1,800
Hays	2,000
Hemphill	700
Henderson	3,000
Hidalgo	7,700
Hill	4,500
Hockley	900
Hood	800
Hopkins	3,100
Houston	2,900
Howard	3,500
Hudspeth	400
Hunt	6,900
Hutchinson	2,100
Irion	200
Jack	1,100
Jackson	1,200
Jasper	1,900
Jeff Davis	200
Jefferson	23,600
Jim Hogg	500
Jim Wells	1,300
Johnson	4,100
Jones	3,500
Karnes	2,300
Kaufman	4,300
Kendall	1,000
Kenedy	60
Kent	400
Kerr	1,600
Kimble	600
King	100
Kinney	400
Kleberg	1,600
Knox	900
Lamas	5,600
Lamb	1,600
Lampasas	1,400
La Salle	700
Lavaca	2,900
Lee	1,200
Leon	1,800
Liberty	2,100
Limestone	4,000
Lipscomb	700
Live Oak	600
Llano	800
Loving	30
Lubbock	7,400
Lynn	1,100
McCulloch	2,100

Texas (Cont'd)

McLennan	16,300
McMullen	80
Madison	1,400
Marion	800
Martin	400
Mason	900
Matagorda	2,200
Maverick	900
Medina	1,600
Menard	600
Midland	1,400
Milam	3,300
Mills	1,100
Mitchell	1,700
Montague	2,200
Montgomery	2,800
Moore	200
Morris	900
Motley	600
Nacogdoches	3,100
Navarro	6,300
Newton	1,000
Nolan	2,800
Nueces	8,600
Ochiltree	900
Oldham	200
Orange	1,800
Palo Pinto	2,500
Panola	1,700
Parker	2,300
Parmer	600
Pecos	1,000
Polk	1,600
Potter	10,700
Presidio	900
Rains	500
Randall	800
Reagan	500
Real	300
Red River	2,700
Reeves	1,200
Refugio	1,500
Roberts	200
Robertson	2,600
Rockwall	800
Runnels	3,300
Rusk	5,500
Sabine	1,000
San Augustine	1,100
San Jacinto	600
San Patricio	2,400
San Saba	1,100
Schleicher	400
Scurry	1,400
Shackelford	900
Shelby	2,700
Sherman	200
Smith	10,200
Somervell	300
Starr	700
Stephens	2,300
Sterling	300
Stonewall	600
Sutton	600
Swisher	1,100
Tarrant	40,700
Taylor	7,400
Terrell	400
Terry	800
Throckmorton	500
Titus	1,600
Tom Green	7,700
Travis	16,300
Trinity	1,000
Tyler	900
Upshur	2,100
Upton	1,100
Uvalde	1,800
Val Verde	2,100
Van Zandt	3,000
Victoria	3,400
Walker	1,900
Waller	1,200
Ward	500
Washington	3,100
Webb	5,500
Wharton	4,000
Wheeler	1,800
Wichita	14,100
Wilbarger	3,500
Willacy	800
Williamson	5,600
Wilson	1,900
Winkler	600
Wise	2,000
Wood	2,700
Yoakum	70
Young	2,600
Zapata	100
Zavala	1,000

Utah

Total Radio Homes: 85,000

Beaver	600
Box Elder	2,400
Cache	4,300
Carbon	2,800
Daggett	30
Davis	1,300
Duchesne	800
Emery	500
Garfield	400
Grand	280
Iron	1,200

Utah (Cont'd)

Juab	1,100
Kane	180
Millard	1,000
Morgan	300
Piute	150
Rich	140
Salt Lake	41,600
San Juan	300
Sanpete	1,800
Sevier	1,500
Summit	1,100
Tooele	1,000
Uintah	900
Utah	7,000
Wasatch	600
Washington	1,000
Wayne	120
Weber	10,100

Vermont

Total Radio Homes: 72,400

Addison	3,400
Bennington	4,500
Caledonia	5,100
Chittenden	10,600
Essex	900
Franklin	5,700
Grand Isle	600
Lamoille	2,000
Orange	2,700
Orleans	3,900
Rutland	10,200
Washington	9,000
Windham	6,200
Windsor	7,600

Virginia

Total Radio Homes: 336,900

Accomac	3,600
Albemarle	7,900
Alleghany	3,900
Amelia	400
Amherst	1,300
Appomattox	600
Arlington	12,200
Augusta	7,700
Bath	900
Bedford	2,500
Bland	300
Botetourt	2,800
Brunswick	1,600
Buchanan	900
Buckingham	800
Campbell	12,400
Caroline	1,200
Carroll	2,000
Charles City	300
Charlotte	900
Chesterfield	1,900
Clarke	900
Craig	300
Culpeper	1,800
Cumberland	400
Dickenson	1,100
Dinwiddie	8,200
Elizabeth City	4,300
Essex	600
Fairfax	2,900
Fauquier	2,900
Floyd	1,400
Fluvanna	600
Franklin	2,300
Frederick	4,300
Giles	1,300
Gloucester	1,000
Goochland	500
Grayson	2,200
Greene	400
Greensville	1,400
Halifax	3,200
Hanover	1,600
Henrico	47,100
Henry	3,200
Highland	500
Isle of Wight	1,200
James City	1,200
King and Queen	500
King George	300
King William	900
Lancaster	1,100
Lee	2,100
Loudoun	2,700
Louisa	1,100
Lunenburg	1,100
Madison	700
Mathews	700
Mecklenburg	2,600
Middlesex	600
Montgomery	3,300
Nansemond	4,100
Nelson	1,200
New Kent	400
Norfolk	44,800
Northampton	2,200
Northumberland	900
Nottoway	1,700
Orange	1,900
Page	1,600
Patrick	1,200
Pittsylvania	9,100
Powhatan	400

Virginia (Cont'd)

Prince Edward	1,600
Prince George	2,600
Prince William	1,700
Princess Anne	1,700
Pulaski	2,700
Rappahannock	500
Richmond	700
Roanoke	22,300
Rockbridge	3,300
Rockingham	6,500
Russell	1,800
Scott	1,400
Shenandoah	2,800
Smyth	2,500
Southampton	2,300
Spotsylvania	3,000
Stafford	500
Surrey	500
Sussex	1,000
Tazewell	3,100
Warren	1,300
Warwick	9,000
Washington	5,200
Westmoreland	800
Wise	4,900
Wythe	2,500
York	600

Washington

Total Radio Homes: 346,900

Adams	1,300
Asotin	800
Benton	1,800
Chelan	7,900
Clallam	4,400
Clark	6,900
Columbia	1,100
Cowlitz	5,400
Douglas	900
Ferry	400
Franklin	1,400
Garfield	800
Grant	900
Grays Harbor	10,400
Island	900
Jefferson	1,500
King	120,200
Kitsap	7,300
Kittitas	3,700
Klickitat	1,800
Lewis	6,800
Lincoln	2,400
Mason	1,700
Okanogan	3,300
Pacific	2,400
Pend Oreille	800
Pierce	35,800
San Juan	600
Skagit	6,600
Skamania	300
Snohomish	16,100
Spokane	38,000
Stevens	2,400
Thurston	6,100
Wahkiakum	700
Walla Walla	7,000
Whatcom	12,600
Whitman	6,600
Yakima	16,900

West Virginia

Total Radio Homes: 240,000

Barbour	1,400
Berkeley	4,200
Boone	2,500
Braxton	1,800
Brooke	5,000
Cabell	16,400
Calhoun	1,200
Clay	1,000
Doddridge	1,100
Fayette	8,800
Gilmer	800
Grant	700
Greenbrier	3,800
Hampshire	1,200
Hancock	4,200
Hardy	700
Harrison	13,600
Jackson	2,100
Jefferson	2,200
Kanawha	28,800
Lewis	3,100
Lincoln	1,300
Logan	6,900
McDowell	9,200
Marion	10,900
Marshall	4,800
Mason	2,000
Mercer	9,500
Mineral	2,500
Mingo	4,600
Monongalia	8,000
Monroe	900
Morgan	700
Nicholas	1,800
Ohio	16,900
Pendleton	600
Pleasants	900
Pocahontas	1,400
Preston	2,700
Putnam	1,300
Raleigh	9,200
Randolph	2,900

W. Virginia (Cont'd)

Ritchie	2,100
Roane	2,300
Summers	2,500
Taylor	2,800
Tucker	1,200
Tyler	1,800
Upshur	1,800
Wayne	4,500
Webster	1,200
Wetzel	2,700
Wirt	700
Wood	11,000
Wyoming	1,800

Wisconsin

Total Radio Homes: 578,800

Adams	900
Ashland	3,300
Barron	6,100
Bayfield	1,700
Brown	14,300
Buffalo	2,600
Burnett	1,300
Calumet	2,300
Chippewa	6,300
Clark	4,500
Columbia	6,400
Crawford	2,500
Dane	27,100
Dodge	8,500
Door	3,000
Douglas	9,200
Dunn	4,900
Eau Claire	9,100
Florence	400
Fond du Lac	13,100
Forest	1,200
Grant	7,500
Green	5,100
Green Lake	2,400
Iowa	2,900
Iron	1,200
Jackson	2,400
Jefferson	8,700
Juneau	2,500
Kenosha	11,400
Kewaunee	2,700
La Crosse	12,600
Lafayette	3,100
Langlade	3,300
Lincoln	3,700
Manitowoc	11,100
Marathon	10,000
Marinette	4,600
Marquette	1,300
Milwaukee	167,800
Monroe	4,200
Oconto	3,000
Oneida	3,300
Outagamie	13,500
Ozaukee	3,000
Pepin	1,400
Pierce	3,600
Polk	4,300
Portage	8,500
Price	2,600
Racine	18,200
Richland	2,900
Rock	16,100
Rusk	2,100
St. Croix	4,100
Sauk	6,300
Sawyer	1,300
Shawano	4,500
Sheboygan	14,800
Taylor	2,100
Trempealeau	4,200
Vernon	3,900
Vilas	1,300
Walworth	7,900
Washburn	1,600
Washington	5,300
Waukesha	10,700
Waupaca	6,100
Waushara	1,900
Winnebago	17,000
Wood	7,000

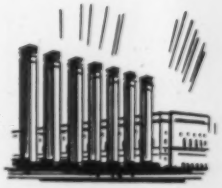
Wyoming

Total Radio Homes: 44,600

Albany	2,800
Big Horn	1,700
Campbell	800
Carbon	2,500
Converse	1,200
Crook	600
Fremont	2,300
Goshen	1,900
Hot Springs	800
Johnson	800
Laramie	6,200
Lincoln	1,700
Natrona	6,400
Niobrara	700
Park	1,600
Platte	800
Sheridan	2,000
Sublette	600
Sweetwater	2,000
Teton	600
Uinta	1,400
Washakie	1,000
Weston	1,000
Yellowstone Park	1,000

We call it Cleveland -- but Advertisers

SAY IT'S "*TEST TOWN*"



Old Moses Cleaveland certainly would be surprised to see the way things are going these days in the old home town.

More wage earners are at work than since the days of way-back-when. The weekly payroll of the community is up to three and one-half million. Nearly as much building has been done in the first five months of this year as during all of '35. Lakes shippers are having their busiest year since '29. Bank debits are en route to a cool billion increase over last year. The mammoth Great Lakes Exposition is entertaining seven million visitors. Two hundred conventions are scheduled here. Money, and more money, is being put into Cleveland pockets . . . money to be spent for your goods.

No wonder, even though we still call it Cleveland, that advertisers say it's "Test Town," the place with money to spend, people with the inclination to spend it . . . and a real radio station to do the selling job!

And the fact that WGAR is first in number of accounts and total dollar volume of all stations in this area is good reason why the "Friendly Station" should be your choice in "Test Town" too.

W·G·A·R

"CLEVELAND'S FRIENDLY STATION"

Member N. B. C. Blue Network
John F. Patt, *Vice-President and General Manager*
Edward Petry & Co., Inc., *National Representatives*

Station Operation, Management Is Planned by Trans-American

John L. Clark, President; E. J. Rosenberg, Executive V. P.; Officials of Group of Stations to Affiliate

FORMATION of Trans-American Broadcasting & Television Corp. as an entirely new entity in the broadcasting field to devote itself to station operation and commercial program sales and development, was announced June 17 by John L. Clark, general manager of WLW, Cincinnati, who becomes its president. E. J. Rosenberg, for the last three years general manager of Society of European Stage Authors and Composers (SESAC) has been elected executive vice president of Trans-American, and has resigned his SESAC post effective July 1.

Mr. Clark

Mr. Clark asserted the company has financial resources in excess of $2,000,000, and has been incorporated in New York, culminating two years of planning. He declared any announcement beyond the formation of the company is premature, and that no details could be divulged as to other executive personnel, financial backing and projected plans until other resignations of key officials take place next month.

Offices of the new company have been leased at 521 Fifth Ave., New York City.

Corporate Powers

Mr. Rosenberg

A SEARCH of corporation records in Albany disclosed that Trans-American had filed incorporation papers with the Secretary of State for the purpose of engaging in "radio broadcasting, television and network business." The papers were filed by Sol A. Rosenblatt, New York attorney, who is identified with Associated Independent Radio Stations, in which Powel Crosley and Mr. Clark are the prime movers. Mr. Rosenblatt is a former NRA Division Administrator and prior to that was in the law firm of the late Nathan Burkan, general counsel for ASCAP. The association of both Mr. Rosenberg and Mr. Rosenblatt, both experts in music copyright, with Trans-American, has given rise to speculation as to the part this organization may play as a music licensing and supply source.

Beyond the statement that the company would engage in broadcasting and television operations on a national scale as the eventual plan, Mr. Clark said he was not at liberty to speak further. It is understood, however, that a number of broadcasting stations in important markets are definitely identified with the project through ownership which would figure in the Trans-American operations. The television phase, of course, looks into the future.

Mr. Clark resigned from WLW, with which he has been identified for the last decade, as of July 1. His contract with Trans-American is for five years. He probably will continue in an executive advisory capacity with WLW for an indefinite period, since the plan is known to Mr. Crosley, although the latter is not identified with Trans-American.

In addition to Mr. Clark and Mr. Rosenberg it is understood there are a half-dozen other individuals identified with broadcasting who are associated with Trans-American. Within the next month, it is indicated, the company will be a "going concern" by virtue of the ownership of several stations by individuals in the group, and the identity of these individuals and the scope of the project will be clearly defined. Large interests now outside of broadcasting are understood to be identified with Trans-American.

It is emphasized by Mr. Clark that Warner Bros. motion picture interests, which have been seeking a broadcasting network, are in no way identified with Trans-American. Warner Bros. some time ago offered Mr. Clark a position at a salary of $50,000 per year to organize a broadcasting subsidiary, and it also is understood to have broached a partnership arrangement with Mutual Broadcasting System.

Mr. Clark plans to be in the East July 2, after which he will attend the NAB convention in Chicago July 5-8. Who his successor will be at WLW has not yet been indicated, and it may be that for the next several weeks Mr. Clark himself will continue his management by remote control.

Broadly, it is indicated that Trans-American plans may embrace not only the operation of stations to be identified with it, but also the lease-management of other stations much after the fashion Ralph Hitz manages a group of hotels through identical operation methods.

In station sales, it is presumed group rate structures will be worked out. National representation also may fall within the scope of the organization, along with transcription production. Trans-American, Mr. Clark declared, is not a holding company but one which will engage in operations.

One of the best known radio executives in the country, Mr. Clark has been with WLW since 1927, serving initially as an announcer, production man, continuity writer, salesman and finally becoming its general manager. He is credited with having sold upwards of $6,000,000 of broadcast time over the station. He also has been general manager of WSAI, Crosley's regional station in Cincinnati.

Mr. Clark, who is 34, has been prominently identified, among other things, with the formation of Associated Independent Radio Stations Inc., a group of independently owned stations which has as its objective handling of problems of mutual interest to such stations, notably in the field of copyright. Prior to joining Crosley he worked in various sales jobs, running the gamut from automobiles and accessories to stocks and bonds, life insurance, collapsible garages, steel signs and phonographs.

Mr. Rosenberg, who also is in his thirties, has had wide experience in the motion-picture and theatrical field in New York, as well as in radio. He recently made a swing about the country visiting stations. He is a graduate of Harvard University and Harvard School of Business Administration.

Corporate Provisions

CAPITAL stock of the corporation was listed at 3,500 shares, 2,500 shares having a par value of $100 each as preferred stock and 1,000 shares of common stock of no par value in the papers filed in Albany. The incorporators are identified only as Elizabeth Woods, Sydney Spector, and Marjorie L. Soper, all of 630 Fifth Ave., New York, which is Mr. Rosenblatt's office. They hold one share each.

The corporation would be permitted to apply for, hold, and elect and operate one or more radio stations to "broadcast, communicate or receive for the purpose of entertainment and informing and generally engage in radio broadcasting, television and network business."

The papers also authorize Trans-American to "manufacture, buy, sell or deal in electrical, automotive or radio equipment used in connection with radio; to deal with scenarios and manuscripts, to acquire property, etc. necessary to corporate purposes; to have trade mark, etc., to print, publish, issue pamphlets and magazines of every character and distribute them; to conduct advertising and publicity business; to make, own and acquire scenery, costumes, effects, etc.; to represent as managers, artists, actors, etc.; to deal in every type of literary, dramatic and musical property by purchase or exchange to other firms, associations, etc.; to deal with shares of capital stock; to borrow or raise money without limit."

Authentic Remote

AFTER interviewing a prisoner at the San Francisco County Jail, recently where he was gathering material for his serial *Your Fellow Man's Opinion*, Bill Davidson, writer and producer at KFRC, that city, found himself a prisoner. Completing his task, a jail-keeper pointed, indicating the direction of exit, but Davidson confused by the maze of steel gratings and bars wandered about the huge building without success. Prisoners thinking Davidson a newcomer, welcomed him with pleasantries. It was 30 minutes before he was able to attract attention of a jailer and was "let out" under guard.

Radio Markets Inc. Is Formed By Deutsch for Local Stations

FORMATION of Radio Markets Inc., as a subsidiary of World Broadcasting System Inc., to undertake exclusive representation for a group of stations affiliated with the spot-transcription company, was announced June 19 by Percy L. Deutsch, WBS president.

Mr. Deutsch announced the enterprise "is in no way competitive with existing representation organizations, but instead is designed to provide a much-needed service for small stations in the smaller markets which heretofore have not been able to interest representatives in the sale of their facilities." Sales operation will begin in the fall.

Basic Requirements

TO QUALIFY for representation by Radio Markets, Mr. Deutsch said, a station must be an affiliate of WBS and one that is located in a market without local radio station competition. The purpose of these qualifications is to simplify the sales story that will be presented by Radio Markets, on a national basis, by reason of the fact that all of the stations will more or less fit into a single category, and all will have World Program Service to be sold with uniform and matched reproducing equipment. The statement continued:

"It is the belief of WBS that a selected group of smaller stations should be extremely valuable to national and regional advertisers that require the same type of intensive market coverage in radio that these same advertisers are now securing through their newspaper campaigns. Radio Markets has been organized, therefore, for the purpose of selling this basic concept of radio coverage in the markets it will represent. Radio Markets' activities will be general, and in no way confined to the accounts using WBS facilities.

"A considerable investment is contemplated for Radio Markets in the work of securing complete market data for each station represented. It is believed that in achieving more widespread use by national and regional advertisers of these markets and the radio stations they serve, a considerable contribution will have been made to spot broadcasting in general, for it is logical to assume that with the sale of the Radio Markets idea to agencies and advertisers, stations in the major markets would also be used.

"Radio Markets does not contemplate representation of stations in the larger centers due to the fact that these markets already have a widespread acceptance on the part of radio time buyers, and the stations therein for the most part already have representation.

"While Radio Markets has already been formed, its operation in a sales capacity will not get under way until fall. During the interim the stations selected from the WBS list will be called upon and preparation of market data will be undertaken for those outlets availing themselves of the Radio Markets plan. Operations of the new company will be under the management of a marketing expert."

Wanted--A Finder for Three Billion Dollars

By JOHN BLACK
Textile Merchandising Specialist, Radio Commentator, Assistant Editor, Textile World

Gigantic Textile Industry All Dressed Up and Ready to Go As Soon as Radio Gets Busy and Goes After the Business

WITH bathing suits and feminine fineries, the EYE appeal wins. But when it comes to the hard-boiled business of selling them, as distinguished from looking, the EAR appeal comes into its own. The textile industry hasn't really discovered radio, and vice versa. There was Real Silk, of course, but really there haven't been enough textile decibels to make many decimals on the sales charts. John Black knows his textiles from warp to woof, and while broadcasters of the revenue-minded type will find a mild kick-in-the-pants message here, it may turn out to be just what the doctor ordered.

THE RISE of the broadcasting advertising industry from nothing to a gross revenue of nearly $100,000,000 yearly in slightly over ten years is one of the remarkable business developments of our time. Indeed, it is not surprising, considering such a rapid-fire growth, that broadcasting should have more or less overlooked certain rich and important markets.

Today, however, things are different. Increasing competition within the broadcasting industry is having a sobering effect. May I suggest then that it is time that broadcasters ceased neglecting prospects that lie right under their noses? The present article will concern itself with one rich vein of golden ore that it just waiting to be tapped.

I refer to a major branch of American industry—my own field of textile manufacture. The following thoughts are laid before you because I am convinced that we of the textile industry and you of the broadcasting field stand to gain mutually by a closer understanding of what radio could do toward helping us to sell textiles.

Let us consider first the scope of the textile industry. According to Bureau of the Census data textile products have a total value of nearly $3,000,000,000. Now, the great majority of this business has no sales message for the consumer at present.

Not a Handout

THAT must be clearly understood to start with. The radio market in the textile industry is not waiting on the doorstep to be picked up; it has to be dug out carefully and patiently. But remember, it will reward such patience. The portion of this three billion dollar industry which does promote to the consumer has a selling budget well worth going after.

Here is our story from the textile side. And it is this that convinces me that textiles *could* and *should* broadcast. During the last ten years one of the most significant developments of the textile industry has been the rising importance of the brand name.

It is my business to come in frequent contact with advertising managers from all branches of the textile industry. They find the problem of selling the brand name to be a major issue. Among them, I hear but one thought and that thought is being dinned into my ears constantly.

It is this: "We must get closer to the consumer!" Go anywhere you will among textile firms which sell through brands and you will hear the same message. Now, is there any more effective way to accomplish that purpose than by a well-rounded all-media campaign which would give radio its proper share of the selling job? I'm sure I don't know of any.

But let us ask ourselves another question. Where do textiles stand at present among the total of broadcast advertisers? It is a sad story. The truth is that textile expenditure for radio is so small that it just does not count. In the broadcasting data compiled by NBC textiles are anonymously included in two groups (a) house furnishings and (b) clothing and dry goods. The grand total of both of these groups (including the very considerable total of retail store broadcasting) is only $800,000. It is obvious then that the textile total is quite negligible compared to the textile industry's size and its promotion outlay as a whole.

MR. BLACK

Now, I am convinced that radio is missing a bet in not going out, hammer and tongs, after textile advertising. Glance over these figures and see whether I'm not right. We will break down the textile industry into fiber and fabric divisions. Of the industry's total value, cotton represents 33.0%; wool 20.6%; knit goods 18%; silk and rayon fabrics 10.5%. The others—bleaching, dyeing and finishing, miscellaneous and rayon are of minor size.

The biggest promise of the whole group is in the knit goods field. The knit goods industry is a business of some $500,000,000 yearly, virtually all of which is sold to the consumer. A substantial part of its business is in brand name merchandise. Thus, even when we subtract the portion represented by unbranded merchandise, the remainder is a sizeable market for radio. It is a legitimate market for any medium which can popularize these names with the consumer. And radio's value in that regard is no longer open to question.

Now let us look at the other divisions. Of cotton's $900,000,000 yearly business a substantial though minor part is sold to the consumer. Even making further deductions for the unbranded cotton goods, the remaining branded merchandise leaves us an important market which could tell its story profitably on the air. Likewise in the wool industry the total $570,000,000 output includes some branded merchandise which has a direct consumer message. And the same may be said even more definitely for the silk and rayon fabric industry.

What then does this mean in terms of merchandising? It means, briefly that for the benefit of both, the broadcasting industry and the textile industry should get closer together. The textile industry, even when we deduct the large non-consumer output, even when we concede every possible "if" and "but" the skeptic may raise—with all that the textile industry still has remaining a nice business in brand goods which must be sold by name (of goods or of manufacturer). The most efficient way to popularize that name is by campaigns which will combine the printed with the radio appeal.

What are textiles doing on the air today? Again the answer is a sad one. They are doing little or nothing. A few firms — hosiery, floor coverings, foundation garments, silk fabrics, suitings—have dabbled with radio. Some really enterprising ones are now on the air, and the rise in their sales figures is its own testimony to the wisdom of the move.

I need only refer you to the amazing success of Real Silk Hosiery which was described in BROADCASTING a few weeks ago. I wonder how many broadcasting firms have used that story of Real Silk as sales talk for their salesmen in contacting other branded hosiery firms? Few, I suspect.

Of course, it must be kept in mind that promotion of radio to the textile industry demands specialized planning. A radio project effective with one mill might be a total failure with another, even in the same field. For instance, Real Silk's success is not a good argument for other brands of hosiery because Real Silk has a sales problem unique unto themselves, as they are the only hosiery firm of their size selling door-to-door.

Selling Brands

OUR most conspicuously available market for radio is in the group of nationally famous textile brand names. Bathing suits, for instance. Outstanding lines of sheets and other domestics. Well known types of underwear, etc., etc. Mention these various garments in an average American crowd and instantly a sizeable list of famous brand names comes to mind. These names are a "natural" for radio. The whole success of such firms depends on keeping their names constantly before the public.

Yet these firms to date have done little or no broadcasting. Now, it is no answer to say that radio costs too much. Don't get the idea that substantial sums are not spent by some of our firms for consumer promotion. True, we do not spend anything like the sums laid out by such gold-plated industries as the automotive field, for instance. But *we do spend*! You can see that when you glance through the advertising pages of the class magazines and to a less extent the general magazines. And note too that our total for other promotion, including fashion shows, runs into big figures.

What do textile firms advertising to the consumer think of broadcasting? My files are filled with correspondence proving that there exists among certain groups of textile advertisers a very definite interest in radio and that they are only waiting to be approached in a convincing way.

Now, what is a convincing way? Recently I made a survey of opinion among textile mills which have been or now are on the air. The answers were enlighening. The main thought expressed went something like this: "We would go further in radio if the broadcasting industry would give us more complete cooperation in planning to tie radio in with other selling. They don't help us to a follow-through, and often because of

(*Continued on page 134*)

Opening of New Radio Frontiers Portrayed

By MARTIN CODEL and SOL TAISHOFF

Billion Dollar Industries Seen in New Broadcast Fields By Industry Leaders at FCC Ultra-Shortwave Hearing

THE GROUNDWORK for new radio industries ranging into billions of dollars, and encompassing such developments as television, facsimile and "apex" broadcasting, was laid during a fortnight of hearings before the full FCC which began in Washington June 15, with some 600 representatives of the best brains and biggest capital in radio present to listen to the views, experiences and demands of about 75 leaders from all branches of the radio arts, industry and science.

From the accumulation of thousands of pages of testimony, the FCC later will attempt to work out a coordinated method of allocating the channels in the ultra-high frequency range above 30,000 kc. to foster development and convert them into maximum use for the public and the nation. A herculean task confronts the FCC and its engineers, for the demand for facilities was ten times greater than the supply. Now it is a problem of choosing the services and pursuits which shall be rewarded with the right to occupy the bands.

The hearings were regarded as the most important before a government agency since the birth of broadcasting 15 years ago. There was the expected stampede of services, both government and private, for wave lengths in this virgin radio area which remains to be subdivided by Uncle Sam.

At the Crossroads

THE KEYNOTE for the sessions was sounded by Chief Engineer T. A. M. Craven, of the FCC, who was prime mover in calling and organizing the hearings, when he referred to radio today as being "at the crossroads". The cue was picked up by many other witnesses. Of significance was the rather general conclusion that if television is to be accommodated in the way its sponsors wish, many other proposed services and operations must go by the boards. Conversely, if these other services are to be accommodated, there may be no room for television on a competitive basis.

There was rather general agreement that television, while technically a great achievement, is still several years away from the public. The testimony also seemed to indicate that a serious patent fight must be adjudicated in or out of court before television patents are sufficiently clarified to make possible its popular introduction. Testimony on this score, in several instances, smacked of the old "anti-trust" onslaught against RCA, which is also in the forefront of visual radio development. The only way in which such patent litigation can be averted, it was generally conceded, would be through arrangements which might be worked out with leading experimenters who have recognizedly basic claims.

Because the ultra-high range is new radio territory, the International Telecommunications Conference to be held in Cairo in 1938 will consider allocation of these frequencies among the nations. The data gathered at the FCC hearings will presumably be used as a basic for American proposals to the international conclave.

Future services on the short and ultra-short waves, with even some suggestions for opening up certain long waves below 550 kc. for super-power broadcasting of the order of 1,000,000 watts, were the subjects of testimony which literally held the big gathering spellbound at some junctures of the protracted sessions.

Wide Interest Aroused

FOR THE most part, the hearings were devoted to proposals for uses in the immediate future of the frequencies from 30 to 200,000 kc., with broadcasting interests naturally concerned because television, facsimile, relay, international and very high frequency broadcasting (apex) services apparently are destined to find their places within those limits. General and specific demands for channels and bands ran between five and ten times the number of available space in the spectrum, dispelling the oft-expressed theories that the ultra-highs offer limitless "avenues of the ether" for the prospective future services.

The hearings were conducted under the direction of Comdr. Craven, who with Chairman Anning S. Prall opened them with discussions of their scope and purpose. [See June 15 BROADCASTING.] While many of the demands were specific, the purpose was to review the broad field of uses and needs foreseen by the various services—after which the FCC and its engineers presumably will divide the available spectrum into service allocations, to be followed by further hearings on specific company assignments within the service bands.

So important were the hearings regarded by the FCC, that they have been under discussion at the White House. No service bands will be reserved, it is expected, until presidential approval of the principles involved has been obtained in view of the broad powers residing in the chief executive to allocate by executive order for national and governmental needs.

Starting with the government demands for more than 50% of the channels between 30 and 200,000 kc., the list of witnesses (the testimony of the chief of whom is excerpted or digested in these columns) included such important industry figures as David Sarnoff, William S. Paley, President William Green of the A. F. of L., Dr. Frank Jewett, S. M. Kintner, James M. Skinner, A. F. Murray, Samuel E. Darby Jr., Maj. Edward Armstrong, Dr. F. A. Kolster, K. B. Warner, Philo T. Farnsworth and many others from such diverse fields as broadcasting, television, facsimile, aviation, marine, police, forestry, amateur and a variety of other services.

Dr. J. H. Dellinger, radio chief of the Bureau of Standards, speaking on behalf of the Interdepartment Radio Advisory Committee of the federal government, provoked a furore at the outset of the hearings by presenting allocations for government use in the 30 to 200,000 kc. band that would reserve 1012 of the 1907 frequencies for government use and only 895 for non-government. He based his calculations of the number of frequencies on a 0.1% frequency separation basis, which some engineers insisted was entirely too wide.

Almost with one accord, the representatives of private services, large and small, attacked these demands as too great in view of the fact that the greatest equipment and service developments will come from private rather than governmental sources—all of which can be taken over by the government in time of war or national emergency.

There were fancy flights of imagination during the course of the hearings, such as Mr. Sarnoff's prediction that "private wave lengths" for individual use may some day be discovered on the ultra-shorts; there were practical demonstrations of new things on the ultra-shorts, such as the "frequency modulation" system for staticless radio demonstrated by Maj. Armstrong, and the first disclosure of amateur findings in the bands below 30,000 kc. by Maj. K. B. Warner, secretary of the American Radio Relay League; and there were words of caution, such as Dr. Jewett's admonition not to go too hastily into unknown realms without definite knowledge, and Mr. Paley's plea that television be approached in an evolutionary way.

What of Television?

TELEVISION, naturally, held the center of interest, the consensus being that it is already a remarkable technical achievement, probably acceptable to the public, but that its inauguration as a system is still some years away. For the first time, as disclosed elsewhere in these columns, such researchers in television as RCA, Farnsworth, Lubcke and others lesser known revealed what they have in the laboratories and what they expect.

The broadcasters, represented by NAB Managing Director James W. Baldwin and Dr. Charles B. Aiken, of Purdue University, as special consulting engineer, were somewhat at variance from the radio manufacturers, represented by President James M. Skinner of the Philadelphia Storage Battery Co. and A. F. Murray of the same concern, for the Radio Manufacturers Association, on proposed television allocations. But they were together on their request that seven 6,000 kc. bands be reserved with sound tracks in the 42,000 to 90,000 kc.

Photo by Times Wide World

AN ABSORBED COMMISSION—This is a candid shot of the full FCC during the ultra-high frequency hearings last month. Maj. Edward Armstrong, Columbia professor and inventor of the superheterodyne, one of the many score of witnesses, is describing his new system of "staticless" broadcasting on the ultra-highs, elsewhere discussed in this issue. Left to right at the Commission table are: Commissioners Brown, Stewart (obscured by microphone), Sykes, Chairman Prall, Case, Walker and Payne. The official transcript of the hearing, incidentally was recorded, hence the numerous microphones scattered on table and dais.

spectrum for television services; and that liberal experimental bands beyond 120,000 kc. also be reserved.

Facsimile likewise was seen as a perfected service whose biggest future development apparently rests on economic considerations. Those attending the conference were particularly impressed by the demonstration of his staticless system of "frequency modulation" by Maj. Armstrong, inventor of the superheterodyne circuit, which is described elsewhere in this issue. While broad claims for ultra-shortwave broadcasting service efficiency were made for this service, it was brought out that it might be particularly adaptable to facsimile in enabling faithful reproductions of high definition pictures to be transmitted and received, removing the "fuzz" still persistent in the present pictures.

Broadcasters Ready

ON THE PART of the broadcasters, they urged the use of ordinary broadcast wave lengths from midnight-to-morning for facsimile.

The broadcasters proceeded on the premise that visual radio—both television and facsimile — as well as apex broadcasting are rightful heritages of those who have developed the sound broadcasting system of this country, and their spokesmen indicated that the industry is ready and willing to invest the huge sums needed when these services are ready for the public.

It was agreed that safety of life and property services, such as maritime, aviation and police, deserved certain priority—but it was also pointed out that the commercial services were always available for emergencies. Demands by certain minor groups were not regarded as having any great chance of success because of their poor showing of contribution toward the science of radio and the public service needs.

One demand in particular aroused great interest — that of Dr. John W. Studebaker, U. S. Commissioner of Education, that a block of frequencies be set aside so that each and every one of the 127,000 local school districts in the United States, as well as the other state and local educational agencies, might have its own broadcasting station for educational broadcasts to the schools.

Police and forestry services asked for more frequencies for their expanding needs, and so did the amateurs, leaving to the FCC one of the greatest problems of evaluating various services one against the other it has ever faced. In the following pages an effort has been made to summarize, so far as possible, the individual statements and demands presented at the hearings.

* * *

Commissioner E. O. Sykes June 24 announced, in a statement read at the conference on behalf of the Interdepartment Radio Advisory Committee, that the government was most desirous of cooperating and collaborating with the radio industry and the FCC in securing adequate allocations for all worthwhile private services. He declared that the original statement for the committee, which was presented June 15 by Dr. J. H. Dellinger of the Bureau of Standards, was in the form of preliminary estimates of government radio needs and should be considered in that light. The government, he added, fully recognized the efforts and developments of the radio industry and in its frequency requests did not wish to place any barrier in the path of any private service of value to the public.

TALKING TELEVISION?—Three of the radio notables attending FCC hearings on future uses of ultra-shortwaves confer in lobby. Left to right: William S. Paley, CBS president; FCC Chairman Anning S. Prall, and James M. Skinner, president of Philadelphia Storage Battery Co. and chairman of RMA television committee.

SARNOFF SEES PROGRESS

Excerpts from statement submitted by David Sarnoff, president, Radio Corporation of America.

IN SUCH a fast moving art as radio, government regulation must have wide powers of discretion. A strait-jacket of rigid rules would cripple its energies. In the Radio Act of 1927 and in the Communications Act of 1934, Congress recognized this fact and wisely refrained from prescribing hard-and-fast formulas. Instead it set up a high standard for flexible regulation, the standard of "public interest, convenience and necessity." That standard gives your Commission the power, and therefore the responsibility, of judging issues on the basis of past accomplishments, of present activities, and particularly on the capacity for future progress.

We of the RCA are especially conscious of the complexity of the problems your Commission must solve in the public interest. That complexity results from a number of circumstances unique to the radio industry.

First: It is the youngest of our country's great industries. Because of the aggressive and dynamic development of the radio art, it has reached its present proportions and its vast social significance in less than 15 years. It has few precedents and no rules of thumb to formulate its policies. At every stage of its progress it must break new ground. It must always be a daring pioneer.

Second: It is an industry that functions in the present, although it lives also for a greater future. Important new radio services are ready today for practical demonstration. Tomorrow they will be ready to serve the public. Others are still in the laboratory stage of development. But beyond are widening perspectives of usefulness: the promises of further radio possibilities which may well out-weigh all the achievements of the past. These developments must be safeguarded against unnecessary restrictions. Radio progress must not be "frozen" at any point.

Third: We deal in radio with a public treasure that—for the moment—is limited in its extent. The frequencies which make up the radio spectrum constitute one of the nation's most valuable natural resources. Each of them must be made to yield its maximum of service under the stimulation of every new discovery.

Billion Hours a Week

THESE are the realities of today. But tomorrow, the pioneers in the radio laboratories may open up unlimited reservoirs of new frequencies and then your Commission must be ready to remold its rules to take advantage of the new opportunities, so that the public may benefit at once from these achievements.

Broadcasting has made even more dramatic strides. When the Harding-Cox election returns were broadcast in 1920, only a few hundred radio amateurs listened in. Today 23,000,000 homes in our country, more than 70% of the total, are equipped with radio receivers, and 3,000,000 American automobiles, more than 10% of all registered motor cars, are radio-equipped. If all receiving sets were tuned to the same program, 90,000,000 persons, approximately three-quarters of our population, could listen at the same time to a single voice. The United States and its territorial possessions have 623 broadcasting stations, representing in ownership a cross-section of American life: Industrial organizations, newspapers, labor groups, colleges, cultural and religious institutions. Affiliated with the two major networks are 196 broadcasting stations. Of these 22 are owned and managed by the network companies. The rest are independently owned and operated.

Not only do the American listeners enjoy the finest broadcast programs in the world without

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Dr. J. H. Dellinger
Chief, Radio Section, National Bureau of Standards

AS SPOKESMAN for the various government departments, represented by the Interdepartment Radio Committee, Dr. Dellinger startled the hearing with a demand for government service of over 50% of the available channels in the range from 30 to 200 mc., using 0.1% tolerances. He said this would mean allocation of 1012 frequencies for government services with the remaining 895 for all private services. If granted, this would make impossible proper allocations not only for television, but for many other services other than broadcasting.

He introduced a chart designed to show how these ultra-highs would be "blocked" for use of various services, but said it is not intended as necessarily representing the government's ultimate conclusion as to the particular location of the bands required. A certain amount of shifting may be made in the light of the requirements of various non-government services based on the findings at the hearings. That information, he said, will be fully considered by the committee in eventual collaboration with the FCC to work out a system of allocation.

Dr. John W. Studebaker
U. S. Commissioner of Education

ASSIGNMENT, for use by state and local school systems, of a band of ultra-high frequencies measuring between 3,000 and 4,000 kc., was asked to set up nationwide school broadcasting. Dr. Studebaker asked that the band be adjacent to the ultra-highs assigned for regular broadcast use.

Financing, declared the witness, could be arranged through savings that would come from the release of school teachers—perhaps three or four from each school, and through the ability to teach larger classes with local radio and with "educational artists" as teachers. Dr. Studebaker's plan envisaged a local station for each of the 127,000 school districts of the country.

William Green
President, American Federation of Labor

BRANDING radio the greatest single public service agency of all times, Mr. Green said it transcended in importance the daily press and any other form of communication or transportation. The printed word, he said, is not comparable to radio. He made no specific plea for additional wave lengths for labor, but emphasized the status of WCFL, Chicago Federation of Labor station, as the "voice of labor".

Allocations, he said, should be measured by the degree of service rendered to society and he urged the FCC to see to it that progress is made along that line in America. He stressed particularly the fact that most people are now "ear-minded" rather than "eye-minded" and that the great laboring classes should be catered to with radio.

Alfred J. McCosker
President, WOR;
Chairman, MBS

SINCE the American broadcasting industry has an enormous investment in property, Mr. McCosker in a short statement urged the FCC to extend the greatest possible latitude to those persons and corporations ready and willing to hazard new investments in the future of the arts of broadcasting. Mr. McCosker spoke from the point of view of the broadcasters, who presumably will be first to take up the opportunities foreseen on the ultra-shortwaves.

In today's broadcasting, said Mr. McCosker, we see "freedom of the press personified". Freedom of future technical development as well as of social obligation was urged.

Mr. McCosker said that television, facsimile and high-frequency broadcasting are not yet ready for the public, and may not be for years to come. Even if successful technically, he added, it will require several years before suitable receiving sets can be distributed.

E. N. Nockels
Mgr., Station WCFL, Chicago;
Secretary,
Chicago Federation of Labor

ATTACKING monopoly in radio, Mr. Nockels called the ultra-highs the last of the great public domains and urged that they be allocated to those who can use them in the public service. He spoke particularly of the public service performance of WCFL, which he said was not interested in profit, but which did sell sufficient time to make possible maintenance of equipment and good programs. Whoever controls radio in the future, he predicted, will control the nation, and he urged therefore that vested interests be not allowed to become entrenched.

KENTUCKY Legislature has killed a bill to place a $1 tax on radio sets.

BALDWIN ASKS MORE BANDS

Excerpts of statement by James W. Baldwin, NAB managing director:

THE broadcasters appreciate this opportunity to appear at hearings designed to develop long term planning for the most effective utilization of American radio for the social welfare. A long range view point is particularly necessary now because of the impending development of new services such as facsimile and television broadcasting. In addition to their technical implications, the imminence of such services raises important economic and social questions regarding American broadcasting. These are far-reaching in scope. They include not only a forward looking evaluation of the general services of broadcasting as a means of mass communication, but in addition, raise highly fundamental considerations such as the safeguarding of the free flow of ideas and information which is the cornerstone of American democracy.

It is my wish to present a concise but comprehensive picture of the social and economic significance of American broadcasting, to indicate the relation of these factors to the problems which the Commission is now considering and to set forth an estimation of the social and economic principles which must underline any policy of future development; and I shall leave the technical considerations involved to another witness.

The first and controlling principle of radio regulation must always be the safeguarding of life and property. However, the highly important and, indeed, unique public service of radio broadcasting as a medium of mass communication must also be given the most careful consideration. This is all the more important because, in times of local and national emergency, a broadcasting system such as the American one, renders service in the way of safeguarding life and property which cannot be duplicated by any other means.

Entertain, Inform, Inspire

THE REGULAR day-to-day service of radio broadcasting as a medium of mass communication is three-fold: To entertain, to inform, and to inspire. Broadcasting renders unique services in each of these three fields which cannot be duplicated by any other means.

Broadcasting also fulfills an important economic function. It facilitates the process of distribution through its activities as an advertising medium. Moreover, the service which it renders makes possible the existence of the radio set manufacturing industry and allied fields of business. Again in times of emergency it becomes an irreplaceable medium of immediate communication with large masses of people; as evidenced in the banking crisis of 1933 and in the floods of this past spring.

It may be said that to entertain is a principal function of radio broadcasting. It is a most worthy one. To take people out of themselves, make them forget their troubles and petty annoyances, aid them in relaxing from the strain of modern life—is a social function *of first magnitude.* For millions of our people radio is the only source of entertainment. Society instinctively recognizes the importance of this function, and it is not without reason that it always has given particular recognition and tribute to those who entertain it.

The information service of radio broadcasting is highly varied. In the past several years it has become one of the services most appreciated by listeners. Broadcasting furnishes purely vocational information such as market reports. It supplements the formal instruction furnished by our school system. It has become a most important agency for the dissemination of news. It adds materially to the general cultural background of listeners. In the United States, where free competitive broadcasting exists, it has constituted an instrument of civic education unparalleled in the modern world.

Broadcasting has rendered these services to a wide variety of people. It has provided the farmer with a great deal of highly essential business information which would lose much of its value if not disseminated immediately upon receipt. Commodity prices, crop, market, weather, irrigation and similar reports are examples to point. It provides the farmer with educational material regarding new developments in agricultural methods.

The appeal which radio possesses in the use of the human voice enables the presentation of this material in a much more persuasive and entertaining manner than possible merely in pamphlet form; so that broadcasting serves to heighten the farmer's curiosity in the various developments and to stimulate his interest in securing further information. Broadcasting also has increased the social consciousness of the farmer and has made him more aware of the problems which he faces. In a comparable degree it serves all classes of our people.

In rendering these services broadcasting has exerted an influence entirely out of proportion with the number of sets available in rural areas. This is accomplished by the gathering of groups to listen to broadcasts which are of special interest to them.

The Wire Problem

THE QUESTION now arises, in the words of the Commission, as to "the dependence of the service on radio rather than wire lines". There are two kinds of wire lines that can technically be used to carry radio service—the telephone lines and the power lines. Both are controlled by powerful monopolies; one of which is the subject of investigation by this Commission.

To divert the service of radio broadcasting from the air to wire lines would be to deny radio service to all who are without telephones or electric lights and to subject those who do have telephones or electric lights to costs which would place wired radio service beyond the reach of the great majority. This would amount to a denial of what ought to be considered one of the necessities of life.

When one considers that the usual monthly telephone service charge is $2.50 or $30 per year it is easy to see why radio set ownership exceeds residence telephones to such a great degree. It is also easy to see how wired radio cannot be expected to render service at a charge which can be met by the great majority of present day receiving set owners, even assuming they would be willing to pay it.

Again wire lines are so often interrupted by storms, floods, fires, etc., that radio broadcasting's present value for the protection of life and property would

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TECHNICAL "BRAIN TRUSTERS"—FCC engineering executives and attorney closely quizzed spokesmen for interests making specific assignment recommendations at allocation hearings. Seated left to right: William H. Bauer, attorney; Lieut. E. K. Jett, assistant chief engineer in charge of telegraph services; Comdr. T. A. M. Craven, chief engineer; Andrew D. Ring, assistant chief engineer in charge of broadcasting services. Standing left to right: Paul Lion, Ray Asserson and K. A. Norton, FCC engineers.

NAB SEEKS LONG WAVES

Summary of testimony of Dr. Charles B. Aiken, special engineering consultant for the National Association of Broadcasters on leave of absence from Purdue University.

DR. AIKEN began by pointing out that the existing broadcast band is greatly overcrowded, showing that of the 38 stations not included in the "local" classification 182, or 47.6%, already are involved in violating the FCC's own minimum distance separations for night operation, and that 60 stations violate daytime separations. Directive antennas, he said, might modify these figures but only to a slight extent.

For the expanded needs of broadcasting, Dr. Aiken foresaw only two possible avenues (1) below 550 kc., and (2) in the high-frequency range. For the future he urged a policy of evolution and experimentation, without any early commitments, that would penalize sound engineering principles in an effort to protect poor equipment. He also suggested that unimportant low power transmitters should not be allowed to prevent the use of high power on important channels.

Facsimile, the speaker said, should be permitted on all channels set aside for aural broadcasting, including the 550 - 1600 kc. band. While midnight to morning is a convenient time for experimental work on facsimile, he said, it seems likely that on some channels it should eventually be allowed to alternate with regular broadcasting, or even to constitute a 24-hour service.

The NAB technical spokesman, in his introduction, proposed that the following bands be made available to aural broadcasting, subject to certain variations: 180-210, 520-1600, 25,600-26,600, 36,000-38,000, 62,000-64,000 and 94,000-100,000 kc. Above 120,000 kc., he suggested that allocations be kept flexible for various experimentation.

Long-wave Stations

GOING into the specific proposals, which led to a severe cross examination by FCC engineers when he concluded, Dr. Aiken began by contrasting European and North American uses of the long waves. He asserted there were now 78 longwave broadcasting stations in the world, of which 36 are in Soviet Russia. The properties of the 180-210 kc. band for superpower of the order of 1,000,000 watts were discussed, and contour maps were exhibited, indicating the estimated 3 millivolt and 1 millivolt lines of five such stations which would cover the United States. One such station located about 70 miles east of Cincinnati, it was stated, would service 25,000,000 people within its 3 millivolt contour, including such widely separated cities as St. Louis, Milwaukee, Detroit, Pittsburgh, Chattanooga and Nashville. The five stations would serve the whole country and still have overlap, and the fading-free service area would have a radius of between 250 and 400 miles.

Dr. Aiken tabulated the stations shown in the Berne listings now operating between 175 and 215 kc., and gave suggestions for accommodating them elsewhere. It was shown that many low power units, such as Pennsylvania's state police code stations, the Ontario hydro-electric power commission's stations, etc., need not occupy these valuable long waves.

Even with substantial power, Dr. Aiken pointed out, the International Ice Patrol in the North Atlantic, operating on 175 does not seem to suffer from an existing 75,000 watt station on 174 kc. in Paris, which would certainly seem to be a greater threat than would a broadcasting station on 180 kc. in the Western part of the United States.

It was suggested that Air Commerce stations now operating below 230 kc. would, without loss of usefulness, be moved to one or more of four frequencies between 403 and 432 kc., leaving a clear space between 215 and 230 kc. for use by Army aircraft stations.

Ultra-high Problems

THE QUESTION of broadcasting on 520, 530 and 540 kc. was next taken up and suggestions were made for modern marine apparatus that would greatly improve the efficiency of marine communication services, and at the same time make it entirely possible to operate 50,000 watt broadcasting stations on those frequencies if the stations were located in the North Central part of the U. S. He pointed out that there are already 13 broadcasting stations in the world operating below 550 kc., including a 1,000 watter each on 530 and 540 in Canada, and that a fourteenth is projected for 520 in Canada. Some of these are of such power and distance from salt water as to cause far more interference to the maritime services than would 50,000 watt stations in the North Central U. S.

NAB SPOKESMAN—Dr. Charles B. Aiken, Purdue University professor, as he presented long and shortwave technical cases of the broadcasters. Prof. Aiken is on leave of absence from the university to devote his time to the NAB.

Regarding possible interference to naval units operating between 500 and 550 kc., the speaker concluded that while such interference would be appreciable it would by no means be serious.

Consideration was next given to some of the technical problems of ultra-high frequency broadcasting. These included variation of coverage with frequency, man-made interference, interference range of a broadcast station, spacing between stations operating on the same frequency, widths of channels to be transmitted, frequency separation of local assignments, and certain features of ultra - high frequency receivers.

Dr. Aiken suggested that spacings of not less than 250 miles be employed between aural broadcast stations operating on the same frequency. It was pointed out that there seems to be no way of obtaining enough channels for a really satisfactory television service, and that consequently a compromise should be made between protection from interference and the need for crowding stations fairly close together. Rather than have too few transmitters it would be better to slightly reduce the service range of each station, Dr. Aiken said. It was therefore recommended that spacings of the order of 150 miles be tentatively adopted and that the Commission should try to work up distance tables taking account of antenna heights, elevation of the intervening terrain, and other factors that will vary from one locality to another. The use of directive antennas for television broadcast stations and a careful arrangement of transmitter sites in a given area were also recommended.

Bands for Television

HE RECOMMENDED that television be assigned a band from 64 to 94 mc. and another band below 56 mc. This latter band might have its high end at 56 and its low end at 38, thereby allowing three 6 mc. television channels, Dr. Aiken said, adding that if this were done there should an aural broadcast band from 36 to 38 mc. On the other hand, if the lowest frequency television channel was thought to be undesirable because of sky wave interference, or unjustified, then the 2 mc. aural band should be adjacent to the low end of the television band. He recommended that amateurs be allowed to keep their present band of 56 to 60 mc. since they have probably earned a right to some such assignment, and in any event the harmonics of amateur transmitters in the 28 to 30 mc. interval would cause very serious interference between 56 and 60 mc.

If the amateur band is allowed to remain, there is no reason why other services requiring relatively narrow bands should not be allowed to take advantage of the particular properties of the 60 mc. waves, according to Dr. Aiken. He then recommended that 60 to 62 mc. be made available for non-broadcast services and that 62 to 64 be assigned to aural broadcasting. Another band for aural and facsimile broadcasting and for frequency modulation was suggested, running from 94 to 100 mc. Because of the different properties of the various frequency bands and of the incomplete information concerning these bands, he held that at least the three bands recommended should be set aside for the development of aural and facsimile broadcasting.

He suggested that the interval from 100 to 120 mc. be set aside for auxiliary broadcast services such as ultra-high frequency broadcast pickup, studio-to-station radio links, inter - station program circuits, synchronizing control links, facsimile pickup and possibly television pickup, although the latter may have to work at still higher frequencies.

Since it is impossible to obtain an adequate number of television channels below 100 mc. he recommended that the FCC keep in mind

SKINNER SCANS FUTURE

Excerpts from testimony of James M. Skinner, president, Philadelphia Storage Battery Co. and chairman, Radio Manufacturers Association Special Committee on Television:

RMA views television as simply a logical future extension of radio. A television receiver is not as different from a radio receiver as one might surmise. In each case a properly engineered aerial is required to pick up the signal. In each case a radio set is required to select and amplify it. The real difference comes at the end point. In a sound radio receiver the amplified signal is converted into sound through a loud speaker. In a television radio receiver the amplified signal is converted into a picture through a large glass cathode ray tube.

It is logical to expect that the same companies which have successfully made sound radio receivers will in general be the companies who will successfully make television receivers.

Sound broadcasting and television broadcasting will not be competitors. Television will never supplant sound radio. It is wholly unlikely that television will be used anything like the number of hours per day that sound radio is used. Sound radio is used, not only as a primary source of entertainment and education, but also as a background while reading, resting, working, or playing bridge. Looking at television requires concentration. Television in too large doses would be tiring. However, the addition of daily television programs at certain hours, covering perhaps news events, sports events, playlets, skits, etc., should be a very important and significant addition to the home life of the American people.

Television and the movies should not, in the opinion of RMA, be serious competitors. Television will never supplant the movies. Of course, it may be argued that some people may stay home to see a news or sporting event or a play rather than go out to the movies. But, as in the case of radio broadcasting, the stimulation of the public mind to greater interest in wider fields should encourage their greater attendance in person at the movies, sporting events, or theatre.

Furthermore, the gregarious instinct of the human race to gather in crowds is fundamental and will never be changed by television or anything else.

It is likely also that television

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the desirability of eventually having about 25 television channels above 130 megacycles.

Questioned by Comdr. Craven

SUBJECTED to a rigid cross examination by Comdr. Craven, Dr. Aiken admitted that the engineering committee of the NAB and the NAB membership had not approved his report due to lack of time, but he said it had the full approval of James W. Baldwin, NAB managing director. The trend of Comdr. Craven's questioning indicated that other considerations and uses, some of them obviously of a military and secret character, negatived any possibility of opening up the 180-210 kc. long wave band, Comdr. Craven asserting at one juncture that "we can't be guided solely by scientific factors if they are in conflict with social and economic factors," some of which he indicated transcended the needs of broadcasting. Comdr. Craven pointed out that there are already 367 stations exclusive of mobile now operating in the 175-215 kc. band. He inquired into costs of the superpower stations proposed by Dr. Aiken, who said he had no figures but who insisted they are not out of reach in view of the tremendous investments represented in 500,000 watt station which he called entirely feasible economically.

Lack of daytime coverage in certain parts of the country, Dr. Aiken stated on cross examination, was the primary reason for the desirability of superpower on these long waves. Asked if only two or three such superpower stations could be licensed, the NAB would still want them, Dr. Aiken replied in the affirmative. Asked whether he thought these few stations should be licensed to private interests, Dr. Aiken said he presumed that would be the case.

Dr. Aiken saw no conflict between his long wave demands and the growing demands for powers of 500,000 watts on the clear channels. As for the 520, 530 and 540 kc. proposals of the NAB engineering report, Dr. Aiken said he could not suggest at this time that these frequencies should be used for 50,000 watts power or regional powers. They might be used with directional antennas, he said, and to Comdr. Craven's point that safety of life at sea and in the air might have precedence, he replied that ship radios should be forced to abandon obsolete equipment and operate at high efficiency as a primary safety factor. Dr. Aiken insisted the waves could be used in the interior of the country without interfering with other services, as is being done in Europe.

So far as the ultra-high "apex" frequencies are concerned, Dr. Aiken said he thought their present power limit was 1,000 watts. As for the government sharing the television frequencies with private services, Dr. Aiken said the results would be disastrous.

PALEY URGES OPEN DOOR

Excerpts from the testimony of William S. Paley, president of CBS.

AS YOU know, Columbia is not a manufacturing company; not a holding company for patents; not a development laboratory. We are a service organization broadcasting to the public, existing only with the public's approval of the service we give. For this reason we are perhaps justified in thinking that our conclusions have an advantage of perspective, and are closely allied with the interests, the needs, the desires of the American public.

Specific problems of what frequencies should be assigned to the various services concern us less than a few broad principles, faithfulness to which will do most to assure that the combined application of all radio resources will best serve and protect the public.

This is the first principle: If broadcasting, aural, visual, or both, is to continue to advance, it must be economically sound. It must be kept on a firm business footing. I do not think many of us will disagree on this point. It is part of the basic American viewpoint that a service which is to be a constructive force must be self-supporting. It must be alive enough to pay its own way. This makes it, among other things, responsive to the public will. For it must quickly adjust itself to the public demand, or lose revenue and be wiped out.

It is worth noting, I think, that economic self-sufficiency has made American radio one of the finest broadcasting services in the world. It has certainly made it the most unshackled broadcasting service in the world. Its independence of political control is one of the surest guarantees that it will help perpetuate our representative political system.

If private capital is going to continue doing the sort of broadcasting job it has started out to do in this country, its past investment must not be ignored. I say this because there must be constant encouragement to capital flow if the people of America are to have the benefit of every technical discovery, every creative advance.

For this reason, sudden, revolutionary twists and turns in our planning for the future must be avoided. Capital can adjust itself to orderly progress, it always does. But it retreats in the face of chaos.

We are on the threshold of a period of transition for the next couple of years. We should do everything in this period to advance experimentation. But we should do nothing to weaken the structure of aural broadcasting in the present band until experimentation in other bands has yielded us new certainties.

For instance, allocations in the present broadcast band are such that even a few minor changes might upset the whole plan of the structure. The present layout is like a chess game. A single move can have almost infinite ramifications.

The really immediate question in this connection is whether we should do anything at all to present commercial broadcasting facilities until we know where broadcasting is ultimately going. There already appear to be enough economic uncertainties for us to consider, without our voluntarily assuming still more at this time. The same consideration would apply to any sudden large addition to present aural broadcasting frequencies. Reckless expansion might so scatter the audience that it would be impossible for many small stations to survive economically.

The same economic forethought should be applied to the proposed use of super-power for stations in the present broadcast band. Since

Specific Requests for Assignments Made at FCC Hearings

AMATEUR

American Radio Relay League—4,000-4,500, 7,300-7,500, 112,000-120,000, 224,000-240,000 448,000-480,000, 897,000-960,000 kc.

AVIATION

Radio Technical Committee on Aeronautics—6,210 kc. for itinerant aircraft; airport in lieu of 278 kc.; a band of frequencies above 30,000 kc.

Brown Rayphones, San Francisco—asks frequencies in band from 30,000-150,000 kc. to be allocated by FCC.

BROADCASTING
(Including Facsimile)

National Association of Broadcasters—180-210, 520-1600, 25,600-26,600, 36,000-38,000, 62,000-64,000, 94,000-100,000 kc.

Radio Manufacturers Association—500-1600, 25,600-26,600 kc.

GOVERNMENT

Interdepartmental Radio Advisory Committee—30,000-42,000, 50,000-56,000, 60,000-65,000, 72,000-77,000, 89,000-94,000, 106,000-116,000, 128,000-138,000, 150,000-170,000, 180,000, 192,000 kc.

HIGH-FREQUENCY (APEX) BROADCAST

National Association of Broadcasters—36,000-38,000, 62,000-64,000, 94,000-100,000 kc. (In latter band frequency modulation service also asks space.)

INTERNATIONAL BROADCASTING

National Association of Broadcasters—6,150-6,500, 9,600-9,800, 11,900-12,100, 15,350-15,500 17,800-18,050, 21,550-21,750 kc.

MARITIME (TELEGRAPH)

Mackay Radio & Telegraph Co.—Asks increase in 8,230-8,340 kc. ship band; also asks for block of frequencies in 30,000-50,000 kc. band.

Brown Rayphones—Asks for frequencies in 40,000-75,000 kc. band.

MARITIME (TELEPHONE)

Mackay Radio & Telegraph Co.—Asks block assignments in 30,000-50,000 kc. band.

Atlantic Communications Co.—38,500 kc. for coastal and ship harbor service.

American Telephone & Telegraph Co.—Asks 18 phone channels in 1,600-3,000 kc. band; 6 from 3,000-6,000; 4 from 6,000-11,000; 2 from 11,000-16,000; 2 from 16,000-21,000. Also asks 3 mc. band between 30,000-60,000; 5 mc. band between 100,000-150,000; 8 mc. band between 150,-000-200,000 kc.

Brown Rayphones—Asks blocks between 40,000-75,000 kc.

POINT-TO-POINT TELEGRAPH

Mackay Radio & Telegraph Co.—Asks increase in fixed service allocations between 3,000-3,500 kc.; also several blocks spaced from each other, for point to point and facsimile, within 75,000-100,000 kc. band.

Humble Oil & Refining Co. (geophysical service)—Asks one block of frequencies between 60,000-150,000 kc.

Western Radio Telegraph Co.—Asks 31,500-31,525 and 35,600-35,625 kc. for communicating with isolated points in oil fields. Also asks 100,000-100,100 and 165,000-165-100 kc.; also to be used for point-to-point telephone.

POINT-TO-POINT TELEPHONE

American Telephone & Telegraph Co.—Asks 9 frequencies between 3,000-6,000 kc.; 22 between 6,000-11,000; 18 between 11,000-16,000; 17 between 16,000-21,000 kc. Also asks 3 mc. block between 60,000-100,000; 4 mc. and 15 mc. block unallocated between 100,000-150,000; 5mc. and 25 mc. block unallocated between 150,000-200,000 kc.

Western Radio Telegraph Co.—31,500-31,525, 35,600-35,625, 100,000-100,100, 165,000-165,100 kc. (Same as under point-to-point telegraph).

POLICE AND FIRE *

International Association of Chiefs of Police (Association of Police Communications Officers, Lieut. Edwin Denstaedt, Detroit Police Department, Chairman)—30,000-32,000, 33,000-33,200 35,500-35,700, 37,000-37,200, 37,80u-40,000 kc. Also asks for intermediate frequencies of 2,036 2,040, 2,044, 2,804, 2,808, 2,812, 5,135, 5,140 and 5,195, 1,550-1,715 kc.

New York Fire Department—31,600 for fireboat to headquarters; 32,600 for land fire apparatus to headquarters; 35,600 for point-to-point service from outlying fire stations to headquarters in emergencies; 49,400 for fire fighting direct within fire areas; 65,000 for television fire alarm signaling.

Dept. of Police, Brookline, Mass.—Asks entire band 30,000-40,000 kc.

Brown Rayphones—Asks 37,100, 40,100 and 35,600 kc.

RELAY BROADCASTING (PICKUP)

National Association of Broadcasters—100,000-120,000 kc. for broadcasting synchronization mobile voice and facsimile pickups.

TELEVISION

National Association of Broadcasters—38,000-56,000, 64,000-94,000, 130,000-280,000 kc. (latter to include 25 experimental channels of 6 mc. width).

Radio Manufacturers Association—42,000-90,000 (except 56,000-60,000); 120,000-270,000 kc.

DeForest Television Corp.—Asks no definite band but indicates it wants 100 mc. band between 30,000-300,000 kc.

Brown Rayphones—Asks blocks within 33,000-60,000 and 100,000-150,000 kc.

MISCELLANEOUS SERVICES

Edison Electric Institute (electric light and power industry)—Asks for 2,726 and 3,190 kc.; also 4 frequencies between 2,500-3,000; 4 between 4,500-6,000; 4 between 30,000-42,000; 2 between 45,000-60,000; 4 between 100,000-200,000 kc.

Southern California Edison Co.—Asks 2 frequencies between 45,000-60,000 kc.

Mackay Radio & Telegraph Co.—Asks for special frequencies between 60,000-75,000 kc.

City of New York, Dept. of Plants and Structures—Asks 110,000 kc. for ship guidance into slips; 600,000 for harbor collision prevention; 650,000 for emergency broadcasting link between studios and transmitter.

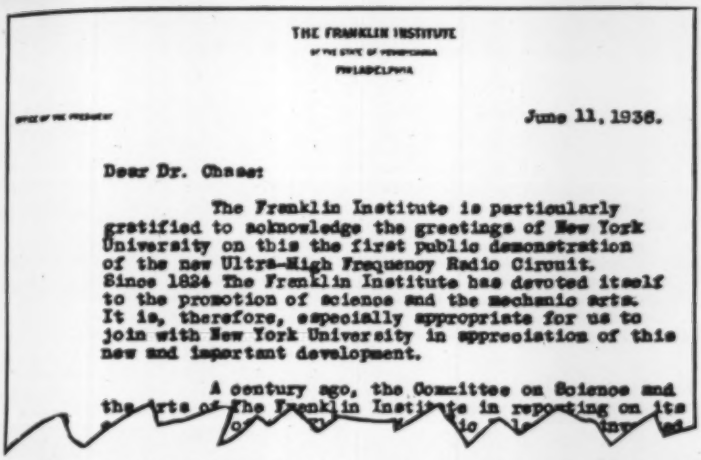
Rhode Island Dept. of Agriculture and Conservation—Asks band of frequencies above 30,000 kc. to be allocated to forest fire service exclusively.

20th Century-Fox Film Corp. (motion pictures)—Asks one frequency in each of following bands: 1,600, 3,200, 6,400 and 50,000 or 60,000 kc.

Brown Rayphones—Asks frequencies for safety equipment in 30,000-50,000 kc. band.

International Scientific Radio Union—Asks for 3,000 kc.; also for a few 10 kc. channels below 30,000 kc. for fundamental scientific research.

*NOTE—Police requests comprise 1550-1715 kc. for state police, and other intermediate frequencies for the new intercity telegraph network already assigned temporarily subject to the outcome of allocations from the hearing. The ultra-high requests are for two-way radiotelephone in police cars, on which 224 licensees with 900 stations are already operating.



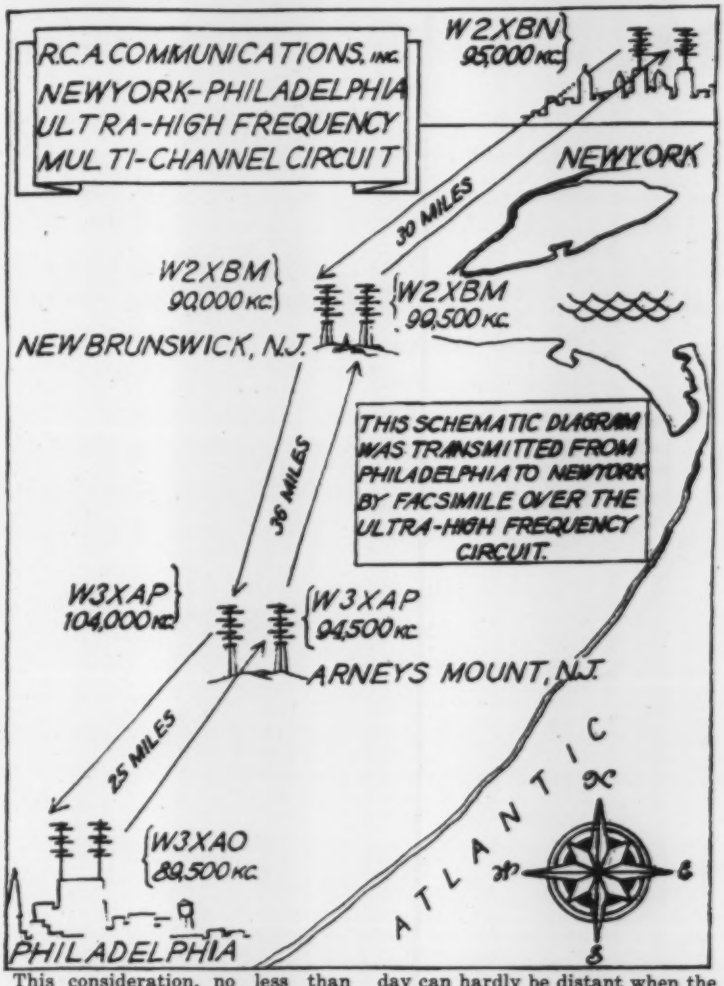
THE FRANKLIN INSTITUTE
OF THE STATE OF PENNSYLVANIA
PHILADELPHIA

June 11, 1936.

Dear Dr. Chase:

The Franklin Institute is particularly gratified to acknowledge the greetings of New York University on this the first public demonstration of the new Ultra-High Frequency Radio Circuit. Since 1824 The Franklin Institute has devoted itself to the promotion of science and the mechanic arts. It is, therefore, especially appropriate for us to join with New York University in appreciation of this new and important development.

A century ago, the Committee on Science and the Arts of The Franklin Institute in reporting on its



FACSIMILES ON THE AIR—Here are reproductions of a schematic and part of a letter transmitted via RCA's new ultra-high frequency "repeater" circuit now in operation between New York and Philadelphia, with booster stations at New Brunswick and Arneys Mount, N. J. The photograph below shows operator preparing to transmit a message on the facsimile sender, giving some idea of the apparatus at both ends. The system operates on about 3 meters and is capable of sending a true letter, picture, map, handwritten message or drawing at the speed of 8½ square inches per minute, or about 6 minutes for a 6 x 8 inch letter. RCA expects this service not only will revolutionize telegraphy by making it a "square inch" service but may also be adaptable to sending pictures into the home on the broadcast waves.

the Commission is soon to give this subject full consideration, I need do no more now than emphasize the importance of balancing carefully the possibilities of increased service against staggering increases in costs of construction and operation.

Probably the most important economic problem we must face—certainly the one uppermost in everybody's mind—lies in the approach of television. Perhaps not all of us realize just how important, or how great, this problem will be.

Cost of Television

WE MAY already have accustomed ourselves to think of higher program costs and rapid obsolescence. But I wonder if it would interest anyone at this meeting to learn that a competent preliminary estimate of the cost of a single television station — engineered only according to standards of present day experiment—was in excess of $500,000. And this cost, incidentally, was only for a station for experimental transmission.

Next in importance, after the principle of economic soundness, is the principle of competition. Adherence to this second principle, also, is essential if the public is to be assured good service—constantly improving service. This is as true in broadcasting as in any other economic undertaking. Our sureness on this point arises from our own experience. The eagerness of broadcasters to compete for the goodwill and interest of the American audience has greatly advanced broadcasting.

The third principle I want to stress has already been developed by the Commission's engineering staff. Your own engineers recommend that the Commission hold fast to a policy of experimentation and evolution. I emphatically agree.

The final principle I want to mention is this: In assigning channels to individuals or to organizations, their demonstrated responsibility should be a fundamental consideration. In some instances this should be a responsibility to the whole American people; in others it should be a responsibility in and to the community the applicant proposes to serve.

In aural broadcasting I think the need for such responsibility has been established beyond argument.

The international bands bring this principle of responsibility into sharp relief in a new way. These waves range the world. Many nations are using them in a planned effort to promote their national interests among other peoples. Organized propaganda is distasteful to the American mind. On the other hand, there can be no doubt that many foreign peoples, through various mediums, have gained impressions about America that are as unfair to us as they are untrue.

Obviously, all Americans share an American interest in the allocation of these waves. So it seems well to consider allocating frequencies in this band only to broadcasters whose sense of responsibility has been shown beyond question. This consideration, no less than technical reasons, wholly justifies the Commission's recent rulings applying more rigid requirements to govern the licensing and the operation of such stations.

The importance of this principle of responsibility, when we think of television, is limited only by our imagination as to the social and cultural force in the nation that television may eventually be.

If television is to flourish, it must be made a nationwide service—a vital part of the life of the American people. Whatever the present technical difficulties, the day can hardly be distant when the public and our national interest will demand network television.

It will be tremendously costly—that goes without saying. Even the preliminary foundation work must cost millions. This can only be justified if adequate allocations are assured. A sufficient number, and, at least in the beginning, only a sufficient number, of responsible organizations signifying a desire to work toward a nationwide, coordinated service should be given some certainty that—if they meet definite requirements in performance—they will receive the necessary encouragement and allocations to go ahead.

Several of our present broadcasting groups have already shown, by their achievements in the medium of today, their fitness to undertake this work in the medium of tomorrow. They have learned much from their pioneer building. Today they are trained, staffed, and equipped with the necessary background of experience, to render a service of public value. America has much to gain from this experience. If the principles of economic stability and of sturdy responsibility which I have advanced are sound, certainly it would seem well to commit television's development into these practiced hands.

Either too much or too little competition might well make us lag many years. I do not know how many television channels will be necessary to insure healthy competition. I do not see how it is possible to know now. But even under the most favorable condi-

tions the number of possible television channels will probably be limited.

I am not advocating narrower channels in order to make more of them. I simply mean that until the requirements of television become clearly defined, as many frequencies as possible should be reserved for it. They should be protected against encroachment by other communication services to the fullest extent consistent with the demonstrated needs of these other services, and always with due regard to the proportionate importance of conflicting claimants.

Government Needs

FOR EXAMPLE, we are all aware of the needs of the communication divisions of the various arms of the national defense. Nothing should be done to cripple them.

In considering their needs, we should remember that in time of war, every available communication facility, private or public, commercial or non-commercial, will be mobilized in the hands of the government. Moreover, to limit peace-time commercial development would be to rob the nation, in time of need, of much that experience has proved to develop out of private initiative, resourcefulness and competition. So it seems to me logical that a reasonable group of allocations in the new bands should be assigned to military use, but broadcast television should not be cramped and crowded into a small corner of the spectrum.

While we recognize the needs of other governmental services, we believe their requirements should be very carefully studied, to determine, first, whether definite need actually exists, and second, the extent to which their needs could be taken care of by existing services, including other means of communication.

Furthermore, let us hope the Commission will find it feasible to allocate television stations in a continuous band of frequencies. This would avoid forcing a listener to tune through bands allocated to other services.

Let me mention *another* factor in television which demands the experimental approach. There has been some assumption that these high frequencies would be confined to local service areas. This would permit numerous duplications of identical frequencies. But we are learning that we have yet to find the exact boundary where waves become optical in nature.

Still another factor, quite within the realm of possibility, is that the television methods now most talked of in this country may not be those in ultimate use here. They may be just the best methods generally known. That does not preclude some wide departure, some complete innovation, in the near future.

I need hardly tell you that Columbia is getting ready for television and is exploring every other possible broadcast development all over the world. The American people have a right to expect from us a major contribution to the benefits they may derive from television and every other appropriate advance in the technique and the art of broadcasting. I promise such a contribution to them now.

Philo T. Farnsworth
Vice President,
Farnsworth Television Inc.

CONCURRING in the technical report of the RMA and supporting its five-year plan, Mr. Farnsworth nevertheless amplified this report with views of his own. He is one of the pioneer experimenters in the visual field and claims ownership of a number of rather basic patent developments.

Use of directive antennas for television receivers was advocated by the inventor. Such antennas, he declared, are simple and economical to build and use and in a great many instances they will be used anyway to increase the sensitivity of the receiver and give better service. By making full use of directivity, he contended, it would be entirely feasible "to place 50 television transmitters having maximum coverage in the seaboard cities between Boston and Washington."

Asserting that it was doubtful whether the present system of amplitude modulation will be the ultimate method used in television, Mr. Farnsworth said recently his company had devised tubes which have the fundamental properties of developing practically any required peak power so long as the average power is kept within their dissipation rating. "We therefore intend to experiment with frequency distortion at the transmitter and suitable frequency compensation at the receiver. If the system can be worked out practically, as it at present appears it can, the effectiveness of a given power radiated by the transmitter will be increased in direct proportion to the increase in the power radiated at the high side-band frequencies.

High-frequency Tubes

"WE LOOK to the future with complete confidence that the very high frequencies between 100 and 1,000 megacycles will be commercially usable within a very short time. We have under development in our laboratory tubes that may be used as oscillators and amplifiers without loss of frequency up to 500 mc. or higher. These tubes are of the cold cathode multipactor variety. We hope to make tubes of this type available to our licensees for experimental purposes within the next few months. At the present time we are attempting to develop a tube which will deliver an output of 500 watts up to 500 mc. When we have succeeded in this it will be possible to build economical one kilowatt transmitters for the band between 100 and 500 mc. This illustrates how the by-products of an important development such as television may open up new frontiers of scientific achievement."

Discussing television receivers, Mr. Farnsworth contended they should not be particularly complicated. In adopting a fixed spacing between sound and vision carriers, he declared, it is contemplated that the tuning of sound and vision ultra-shortwave receivers will be accomplished with one control. Thus, he added, there would be only one additional control, namely that for regulating the intensity of the picture in what is for all practical purposes the present television receiver. "We do not feel that even at the present time the cost of television receivers will be prohibitive," he said.

The Farnsworth receiver, said the inventor, will consist of (1) a combined sound and vision ultra-shortwave receiver, (2) a television scanning chassis, (3) a regulated power supply. The total number of tubes required in these three units now is 19. He said he honed soon to reduce this to 15. "We believe, therefore, that the costs estimated for television receivers are entirely too high. We do not feel that it is at all unreasonable to expect that the cost to the public can almost at once be less than $250 each.

"It is perfectly true that since a television receiver must always include both sound and vision receivers, the combination will always cost more than a simple sound receiver, but it will not necessarily cost more than a sound receiver does today.

"As to the cost of television transmitters, we have had manufactured for us by one of our licensees a complete television transmitting station and the cost is but a small fraction of any of the figures which have been so widely publicized. Television studios, as in the case with sound studios, may be elaborated to any desired degree. It would hardly be fair to take as the cost of a sound transmitting station the cost of the plant at Radio City."

Mr. Farnsworth said he believed amateurs can and should be permitted to share in television development by building their own receivers. He said television presents no more difficulty to amateur receiving set builders than did radio in 1921 and 1922. He took issue with the statement that television must be born a "finished service". He predicted that after the public learns that a few hundred television receivers are operating, even though under experimental field conditions, "it will be difficult for any group to delay its commercial exploitation."

JOLLIFFE ON TELEVISION

RCA's experience and conclusions regarding television brings that company into substantial agreement with the RMA standards, Dr. C. B. Jolliffe, former FCC chief engineer who is now chief of the RCA frequency bureau, asserted in his paper on television. He presented three papers, the first dealing with RCA Communications services and needs and the second with facsimile, the latter paying particular attention to the new "repeater" facsimile telegraph system recently installed between New York and Philadelphia.

The Jolliffe discussion on television, disclosing many details of RCA's television for the first time, provoked considerable questioning, in which Comdr. Craven, Commissioners Sykes and Stewart and Capt. S. C. Hooper, U. S. N., of the government's interdepartment radio committee, joined.

"Up to the present time," said Dr. Jolliffe, "the engineers and executives of RCA have not felt that television was ready for presentation to the public." However, the company has spent and is spending huge sums to make it ready for field tests, formally scheduled to get under way from the 8 kw. Empire State Bldg. transmitter on June 29 with company engineers and experts only as the observers.

"Good television," said Dr. Jolliffe, "can be included in a band width of 6,000 kc., and any reduction in that band width will reduce the quality of the picture which it is possible to transmit." At Camden 343 lines interlaced, 30 frames per second, field frequency 60 per second, were used satisfactorily in a 4,000 kc. band width, with sound track, but Dr. Jolliffe stated:

"For home moving pictures the optimum viewing distance is probably of the order of four times the screen height from the screen. It has been shown that this same relationship holds for television images. Exhaustive tests with television systems and with motion pictures having detail structures equivalent to television show that with a viewing distance of four times the image height in order to have sufficient detail, approximately 440 lines are necessary. Less detail than this will result in unsatisfactory viewing conditions as regards image structure; the scanning lines, for example, will become visible and bothersome. Greater detail (more lines) than this will permit closer viewing distances with satisfactory characteristics.

Calculating Band Width

"USING this number of lines and the other standards, the maximum video frequency band width can be calculated. This calculation when carried through shows that 2,500 kc. is necessary. With maximum video frequency at 2,500 kc. the communication band with both side bands naturally becomes 5,000 kc. For practical receiver designs, a guard band between the maximum video frequency of the upper side and the sound carrier should be 750 kc. Also the guard band between the maximum video frequency of the lower side band and the sound carrier of the adjacent channel should be 250 kc. Thus we have a 6,000 kc. channel.

"In order to radiate a radio frequency modulated with this band width it is necessary to use frequencies for carriers which have the characteristics such that they can be radiated from an antenna system. It is now accepted by all engineers that this can be done only on frequencies above 30,000 kc. and it is in that location that the RMA Committee has made recommendations for the location of television."

Accordingly, Dr. Jolliffe asserted that RCA was in accord with the RMA proposals for the band of 42,000-90,000 kc. (except 56,000-60,000 kc.) be reserved for television. In this band only seven stations would be possible in any one community, he added, the stations having a service range of 20 to 30 miles but an interference range of perhaps 200 miles. Thus there would have to be a "staggered" system of city allocations.

"Experiments show," Dr. Jolliffe

(*Continued on page 132*)

Additional excerpts of the testimony at the FCC epochal hearings will be found on pages 108-132.

WJR
first
in
Power & Results
50,000
WATTS
750 KILOCYCLES
CLEARED CHANNEL
WJR
THE GOODWILL STATION
MICHIGAN'S GREATEST ADVERTISING MEDIUM
DETROIT
G. A. RICHARDS
PRESIDENT
REPRESENTATIVES
EDWARD PETRY & COMPANY, INC.
LEO FITZPATRICK
VICE-PRES. & GEN. MGR.

New ERPI Recording Studios In New York Acquired by WBS

Four Former NBC Studios, Modern Equipment Are Included; Chicago, Hollywood Expansion Planned

Mr. Deutsch

ACQUISITION of the complete new recording studios of Electrical Research Products Inc. by World Broadcasting System was announced June 22 by Percy L. Deutsch, WBS president. The studios, located in the National Broadcasting Company building at 711 Fifth Ave., have just been completed and will be taken over on July 1. While no statement was made, it is understood the deal involves an outlay of between $400,000 and $500,000.

By the transaction, World becomes the sole proprietor of its transcription and spot business. Heretofore, its transcriptions have been produced by ERPI under a licensing arrangement. The transcription plant is declared to be the most modern in the country, including not only the former NBC studios but also associated processing and pressing plants developed by Bell Telephone Laboratories.

Simultaneously it was learned that plans are now under way for the building of complete new studios and processing plants by WBS in Chicago and Hollywood.

Charles Lauda, staff engineer of World, has been named plant manager in charge of operations.

Studios Rebuilt

FOUR large studios, formerly occupied by NBC, have been completely rebuilt and treated in accordance with the requirements for vertical wide-range recording technique. Large, "living-room" size monitor rooms have been designed for each studio, and many other innovations have been incorporated to provide acoustical perfection such as no other studios, either broadcasting or recording, possess.

Studio A on the 15th floor is the largest studio in the world designed exclusively for transcription recording, easily accommodating orchestras of 35 to 100 men. Like all the WBS studios, it is completely air-conditioned, with temperature and humidity controlled to maintain optimum instrument quality and measures 72 feet by 38 feet. It is 20 feet high extending through two floors.

Studio B on the 13th floor is also large enough to contain the largest orchestras quite comfortably, measuring 51 feet by 36 feet in size. Studios C and D on the same floor are 37 feet by 25 feet. These studios all have 20 foot ceilings and are treated like Studio A to give the maximum in acoustic results.

Monitor rooms throughout have been designed in accordance with up-to-date transcription technique, as dictated by years of experience on the part of Bell Laboratories, working in cooperation with the ERPI engineers.

A large rock-wool panel in the room simulates curtains and drapes, while the acoustical treatment of the walls takes into consideration other characteristic living room features. By switching a key on his monitoring table, the recording engineer can change entirely the quality of reception, ranging from the finest wide range quality to typical radio set reception in the home.

The "brain" of the transcription plant is the recording room, on the 14th floor. Here, as a part of the straight-line production process, are eight cutting tables, fed through five channels, including the four studios and a separate channel for direct-wire recording from other radio stations or remote points.

Processing Equipment

IN ADDITION, off-the-air recording is available by means of a special Western Electric radio receiver designed for that purpose. Through this arrangement it is possible to check wire and off-the-air pickups simultaneously if desired.

Each of the eight cutting tables provides for both vertical and lateral cutting, at speed of 33⅓ RPM. The machines are driven by controlled-speed motors electrically interlocked to maintain absolute speed and synchronism. Thus all recording cutting tables operating on the same channel produce identical results on the master wax. This is an exclusive feature of WBS transcriptions.

The recording room, like all studios and the entire processing plant, is air-conditioned, provided with a constant source of clean, filtered air at the right degree of temperature and humidity. The effect of impure, dirt-laden air on delicate instruments or wires, as well as on masters during process, is completely minimized. From wax blanks to finished masters, revolutionary production methods are said to be utilized.

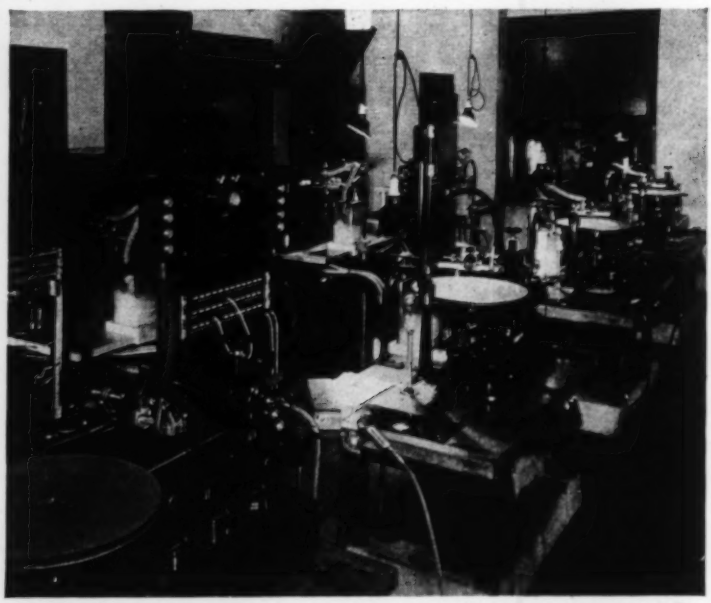
Processing represents an important step in the production of electrical transcriptions. WBS's new galvano equipment at 711 Fifth Ave., only recently installed, is designed to obtain highest possible production speed, consistent with quality. The actual interval between recording and final pressing has been steadily reduced, now providing for as little as 24 hours between studio work and station broadcast, as against 72 hours previously.

The results of this three-fold endeavor to provide the ultimate in sound reproduction are culminated in the three floors at 711 Fifth Ave. Ample facilities, personnel and equipment for every phase of radio recording work are provided in the plant's 50,000 square feet of floor space.

In addition a modern pressing plant has been installed at 660 First Ave. New York. Air-conditioning, and automatically timed presses of the latest designs are part of the many features new to pressing of transcription discs. Discs are to be furnished in Acetate or Vinylite, depending on customers' requirements.

Vacation Profits

VACATION time is a good time to get vacation business, WMEX, Boston, believes. On a tour of New England resorts, 28 hotels were signed for daily announcements on the WMEX Classified Directory. A second trip is bringing in more clients. Marie Mason, WMEX continuity director and sales promotion writer, is the main victim, having to turn out alluring but different copy for each client. Torrey & Ryan, Boston agency, handles most of the accounts, which are signed for from 8 to 13 weeks.



WBS RECORDING ROOM—Here are the eight recording machines in the new World quarters. They are fed by five separate channels.

Hearst Radio Suit For WMAL Denied

Court Holds Contract to Sell Station Was Not Complete

DISMISSAL of the suit filed by Hearst Radio Inc., against the owners of WMAL, Washington, for specific performance of contract under which the station was to have been purchased by Hearst for $285,000 was ordered June 15 by the Supreme Court of the District of Columbia. The court, in an opinion by Justice Jennings Bailey, held that the matters in the conditional agreement for the sale had never been worked out in complete detail and that there had been no "binding agreement".

Moreover, the court held the preliminary agreement provided that the contract should be subject to the approval of the court. Justice Bailey held that since Mrs. M. A. Leese, widow of the owner of the station, one of the chief distributees of the estate "is opposed to the sale, it is more than doubtful whether the contract would be approved by that court".

Appeal Indicated

IT HAS been indicated by Elisha Hanson, counsel for Hearst Radio Inc., that the case will be appealed to the U. S. Court of Appeals for the District of Columbia. Dismissal of the suit tended further to confuse the Washington station situation. WMAL is now operated by NBC under a lease which still has two years to run, at $30,000 a year in leaseholds and $6,000 for studio rentals.

In addition the *Washington Post* has filed application for the WMAL facilities on 630 kc., with 250 watts power night and 500 day. This application has been designated for hearing, probably next fall.

Another half-dozen applications, however, are pending involving stations in Washington. These involve the request of WOL, Washington local for a regional assignment on 1230 kc., with 1,000 watts; two applications by Continental Radio Co., Scripps-Howard Newspapers subsidiary, for both the present and requested assignments by WOL, and two applications by former Senator C. C. Dill, one of the present WOL assignment and the other for a new regional station on 1370 kc., operating with 1,000 watts daytime.

Construed as a retaliatory move against Continental Radio Co., because of its Washington applications, are two applications filed by the United States Broadcasting Co. on June 17 for new local stations in Columbus and Toledo. These request the identical local station facilities sought by Continental.

William B. Dolph, manager of WOL, is the president and principal stockholder of United States Broadcasting Co., which is also applying for the local Washington assignment of WOL on 1310 kc., with 100 watts, in the event the regional station application is granted. The pending requests for the WOL assignments made by Senator Dill and by Scripps-Howard are both made contingent upon an FCC grant of the WOL regional application.

ROLL CALL *at* B.B.C.

NAMES MAKE NEWS . . . Some of them are also making history—sales history—by using WGR and WKBW in the Buffalo market.

- The national non-network advertisers, whose names appear below, have reported sales increases in our front yard.
- There is more money available for goods and service in the Buffalo market than our present advertisers are taking.
- And . . . there is room for more national advertisers on the popular WGR and WKBW schedule.

Automobiles
Chrysler Motors
DeSoto
Dodge
Plymouth
Ford Motor Company
General Motors
Buick
Chevrolet
Packard Motors

Cigars
Congress Cigar Co.
Bernard Schwartz Cigar Corp.
Waitt & Bond

Cosmetics and Perfumes
Bernard Perfumer
Compagnie Parisienne, Inc.
Armin Varady, Inc.

Drugs and Pharmaceuticals
Carleton and Hovey
Carlsbad Salts
Carter Medicine Company
Ex Lax, Inc.
Knox Company
McKesson & Robbins
Maryland Pharmaceutical Co.
Piso Co.
Sterling Products, Inc.
California Syrup of Figs
United Drug Co.
Wildroot Company
Wyeth Chemical Company
Jad Salts

Food Products and Beverages
D'Arrigo Bros.
Bay State Fishing Co.
Bowey's, Inc.
Bunte Bros.
Virginia Dare Extract
Jacob Dold Packing Co.
Educator Biscuit Co.
General Mills
Wheaties
Robert A. Johnston Co.
Kellogg Sales Company
Land O'Lakes Creameries, Inc.
New York State Bureau of Milk Publicity
Pabst-Ett Corp.
Pier Bros.
Ralston Purina Co.
Reid, Murdock & Co.
C. F. Simonin & Sons
Standard Milling Corp.
Wander Company

Gasoline and Oil
Atlantic Refining Company
Bradford Oil Refining Co.
Crew Levick Co.
Gulf Refining Co.
Kendall Refining Co.
Pure Oil Co.
Socony-Vacuum Oil Co.
Tidewater Oil Co.

Household Appliances
American Radiator Co.
American Washing Machine Manufacturers Assn.
General Electric Co.

Household Necessities
Fels and Company
Gardiner Mfg. Co.
101
Gold Dust Corp.
Lever Bros.
Lifebuoy
Spry
McAleer Mfg. Co.
Proctor & Gamble Co.
P & G White Naptha

Insurance
Utica Mutual Insurance Co.

Personal Finance
D & M Finance Corp.
Home & Auto Loan Co.
Household Finance Corp.
Personal Finance Co.

Public Utilities
New York Telephone Company
Niagara-Hudson Power Corp.

Religious
Shrine of the Little Flower
Watchtower Bible & Tract Society

Miscellaneous
Bulova Watch Company
Clark Bros. Chewing Gum
Fred Fear and Company
Gardner Nursery
Hartz Mountain Products, Inc.
ITS Co.
Julian & Kokenge
Justrite Co.

WGR . . . *The Ends of the Dial* . . . **WKBW**

OWNED AND OPERATED BY BUFFALO BROADCASTING CORPORATION
Represented by Free & Sleininger, Inc.

Mutual's Plans to Expand Net May Materialize at NAB Session

Transcontinental Setup by Jan. 1 Now in Prospect; Stations Sought to Break Long Haul From Chicago

PLANS OF Mutual Broadcasting System for expansion into a transcontinental network may crystallize in Chicago coincident with the NAB Convention July 6-8, with definite prospects that service to the Pacific Coast will begin by next Jan. 1.

Negotiations with the Don Lee Broadcasting System, which severs its connection with CBS at the end of the year, have reached a point, it is understood, where all that remains to be done is the signing of the contracts. A wire line haul from Chicago amounting to approximately $200,000 annually will be involved. This is in addition to some $70,000 spent annually by Don Lee for its California network.

At the Chicago convention the Mutual board will hold a meeting —its first in several months. The basic four-station network has been going ahead rapidly during the last year and in addition to WOR, WLW, WGN and CKLW, commercial and sustaining program service is being provided to six other stations in major markets.

West Coast Situation

DURING the convention, also, it is expected that Mutual executives will discuss with station heads in other major markets the possibility of aligning them for service to begin by Jan. 1. The effort is to break up the line haul to the coast as much as possible in the major markets enroute.

The four Don Lee stations which are expected to join Mutual next Jan. 1 are KHJ, Los Angeles; KFRC, San Francisco; KGB, San Diego, and KDB, Santa Barbara. If any other coastal stations are added to the network, it is understood, they will be through arrangements with Don Lee.

In addition to the four basic stations, other stations currently taking Mutual service are WBAL, Baltimore; WCAE, Pittsburgh; WGR, Buffalo; WGAR, Cleveland; WFIL, Philadelphia, and WAAB, Boston. Mutual is interested in procuring outlets, it is believed, in such cities as St. Louis, Des Moines, Omaha, Kansas City, Denver and Salt Lake City. Negotiations have gone forward with stations in each of these cities and such stations as WSM, Nashville; KSO, Des Moines; KOIL, Omaha, and KFEL, Denver, have been consulted, but with no definite commitments. Exaggerated reports of stations dropping existing network affiliations to join Mutual have been circulated.

In St. Louis there has been mention of an affiliation with KSD, and in Kansas City some service has been supplied through WHB, limited time station. This station has a favorable examiner's report for full-time operation, and should it acquire a full-time status by the time Mutual spreads westward, it is viewed as the logical outlet. Conversations also have been had, it is reported, with WDAF, Kansas City, NBC Red outlet.

Expansion of Mutual into a nation-wide network would set it up as a competitor of the three major chains — the two NBC networks and CBS. Many of the stations already taking Mutual service as well as those expected to join the project are affiliated with the other major networks. This has been a complicating factor that may eventually have much to do with changing the basic structures of the network.

The Mutual policy from its inception has been that of a cooperative endeavor. Stations aligned with it charge their regular commercial rates as part of the network and pay to Mutual whatever it costs to procure the business and to defray wire charges.

Cooperative Plan

THERE has been much speculation over the feasibility of a cooperative network plan of this character, but in spite of dire predictions it has functioned surprisingly well. No few people in broadcasting felt it was virtually impossible for such individuals as McCormick of the *Chicago Tribune*, Hearst and Crosley to work together. It develops, however, that these interests have divorced ownership of their newspaper and other interests from their radio operations to the extent that the network is functioning as a separate enterprise.

Presumably, the effort of Mutual will be to offer a nationwide network, in large measure paralelling the coverage of the other basic networks.

KFRU IS ACQUIRED BY ELZEY ROBERTS

SALE of KFRU, Columbia, Mo., to the Star-Times Publishing Co., of St. Louis, for $105,000 was consummated June 16, and approved by the FCC in record time June 20. Luther Hill, principal stockholder of KFRU Inc., negotiated the sales arrangement with Elzey Roberts, president and publisher of the *St. Louis Star-Times*, while both were in Washington.

The station operates full daytime and part nighttime on the 630 kc. channel, using 1,000 watts day and 500 watts night. Mr. Hill, formerly a resident of Alabama, purchased control of the station several months ago.

It is presumed Mr. Roberts will seek to have the station moved to St. Louis, once FCC approval is procured on the transfer. The *Star-Times* already is the licensee of an ultra-high frequency experimental station. Ray V. Hamilton, assistant to Mr. Roberts, is the radio executive of the publishing company. Mr. Roberts several years ago was chairman of the Radio Committee of the American Newspaper Publishers Association.

The *St. Louis Times-Star* recently was heard before an FCC examiner on its application for a new 1,000 watt fulltime station on 1250 kc. in St. Louis. This application was opposed by a counter application for the same facility by WIL, St. Louis.

KOB Sale Approved

SALE of KOB, Albuquerque, N. Mex., for $25,000 cash by the New Mexico State College of Agriculture & Mechanical Arts to interests headed by T. M. Pepperday, publisher of *Albuquerque Journal*, was approved June 20 by the FCC Broadcast Division. The station has been operated by the newspaper for several years under lease. Mr. Pepperday also is business manager of the Rocky Mountain division of the Scripps-Howard Newspapers. Scripps-Howard publishes the *Albuquerque State Tribune* and while it has no corporate interest in the *Journal*, it has a working arrangement with Mr. Pepperday.

WATERTOWN TIMES GETS WCAD LEASE

THE LEASING of WCAD, Canton, N. Y., owned by St. Lawrence University, to the *Watertown* (N. Y.) *Times* was negotiated through Attorney George Sutton in Washington in June, the deal calling for a $10 nominal payment annually with a credit of $1,500 per year to pay for line charges for university programs carried from the campus to the transmitter. The lease is for five years with three five-year renewal options.

Harold John, publisher of the newspaper, is a member of the university's board of trustees along with Owen D. Young, who originally presented the station to his alma mater and who is understood to have agreed to the deal. The station operates with 500 watts daytime on 1220 kc.

Precedents for similar leases, which are subject to FCC approval, were the leasing to commercial interests of KOB, New Mexico College of Agriculture, Albuqerque, to the *Albuquerque Journal*, whose publisher now has a purchase option on it; WESG, Cornell University, to the *Elmira Star-Gazette*; WGST, Atlanta, Georgia School of Technology, to private operators, and WAPI, Birmingham, Alabama Polytechnic Institute and University of Alabama, to private operators.

Church Station Sold

KFXR, Oklahoma City 100-watter owned by the Exchange Avenue Baptist Church but operated as a commercial, has been sold to Plaza Court Broadcasting Co. Inc., a new concern whose stock is 66⅔% owned by M. S. McEldowney, retail hardware dealer and bank director; 16⅔% by John D. Thomas, head of a local investment house, and 16⅔% by C. E. Johnson, attorney and bank director. The deal is subject to FCC approval. KGFG, Oklahoma City's other local, now pends transfer to Harold Hough, manager of WBAP, Fort Worth, to whom it was recently sold.

WDNC to Durham Herald

PURCHASE of WDNC, Durham, N. C. 100-watter on 1500 kc., by the Durham Herald, was authorized by the FCC June 20. Controlling stock was sold by George Watts Hill. John Sprunt Hill, Harris Newman and Herbert Bleuthenthal, all of Durham, the lesser stockholders also disposing of their holdings. The purchase price was approximately $15,000.

Plan for Broadcast Discount Opposed By Arthur Church

Says 2% Proposal Would Mean Increase in Station Rates

Mr. Church

OPPOSITION to the proposal that broadcasting stations uniformly allow a 2% cash discount for payment by agencies within 10 days was expressed by Arthur B. Church, general manager of KMBC, Kansas City, and chairman of the NAB commercial committee June 17 in a reply to the proposal advanced by L. T. Bush, secretary-treasurer of Blackman Advertising Inc., New York.

Indicating that the proposition might be discussed at the NAB convention July 6-8, Mr. Church asserted consistent efforts have been made in recent years by leading advertising agencies to sell broadcasters on the proposition. A few broadcasters, he said, have subscribed to the proposal, but the great majority thus far have disfavored it.

Mr. Bush, in a letter to stations, urged them to adopt the 2% discount as a means of assuring prompt payment of bills by advertising agencies. Many broadcasters, it is reported, feel that if the discount is allowed it should b absorbed by increases in station rates so there will be no reduction in net to them.

Here's Why

IN HIS communication to BROADCASTING, Mr. Church said the reasons expressed by broadcasting disfavoring the cash discount could be enumerated as follows:

1. The theory of the cash discount for merchandise sold in order to obtain quick payment may be sound, but the theory applied to billing of services or facilities is unsound.

2. The practice of cash discounts by publications is more or less firmly established but most publications would now like to do away with it. Because publications set a precedent now resulting in an admitted evil practice is reason why broadcasters should avoid the practice rather than subscribe to the evils.

3. Some broadcasters who subscribed to the cash discount theory admit the practice is unsatisfactory because certain buyers insist on taking the cash discount even though payment is not made within the prescribed limit, and take offense if the undeserved cash discount privilege is denied.

4. Cash discounts create increased accounting, and create erroneous monthly statements.

5. In my own opinion the most important reason why the cash discount practice has not become prevalent among broadcasters is that broadcasting rates, generally speaking, have always been too low. To allow cash discounts the broadcaster must increase rates. The buyer ultimately must pay the bill. The seller is entitled to a reasonable profit.

Competition has been so keen among broadcasters that buyers have benefited from low rates and apparently will continue to so benefit. In the long run the buyer gets what he pays for, and the seller—to remain in business—must make a reasonable profit.

WE'RE TELLING THE WORLD

1 500,000 Watts (application now before the F.C.C.). The last word in transmission power.

2 A vertical half-wave antenna, furnishing maximum signal strength and minimum fading.

3 Beautiful, new, air-conditioned studios, unsurpassed for modern facilities.

4 These latest developments in efficiency high-power broadcast over 820 kilocycles will furnish advertisers with maximum CLEARED CHANNEL COVERAGE.

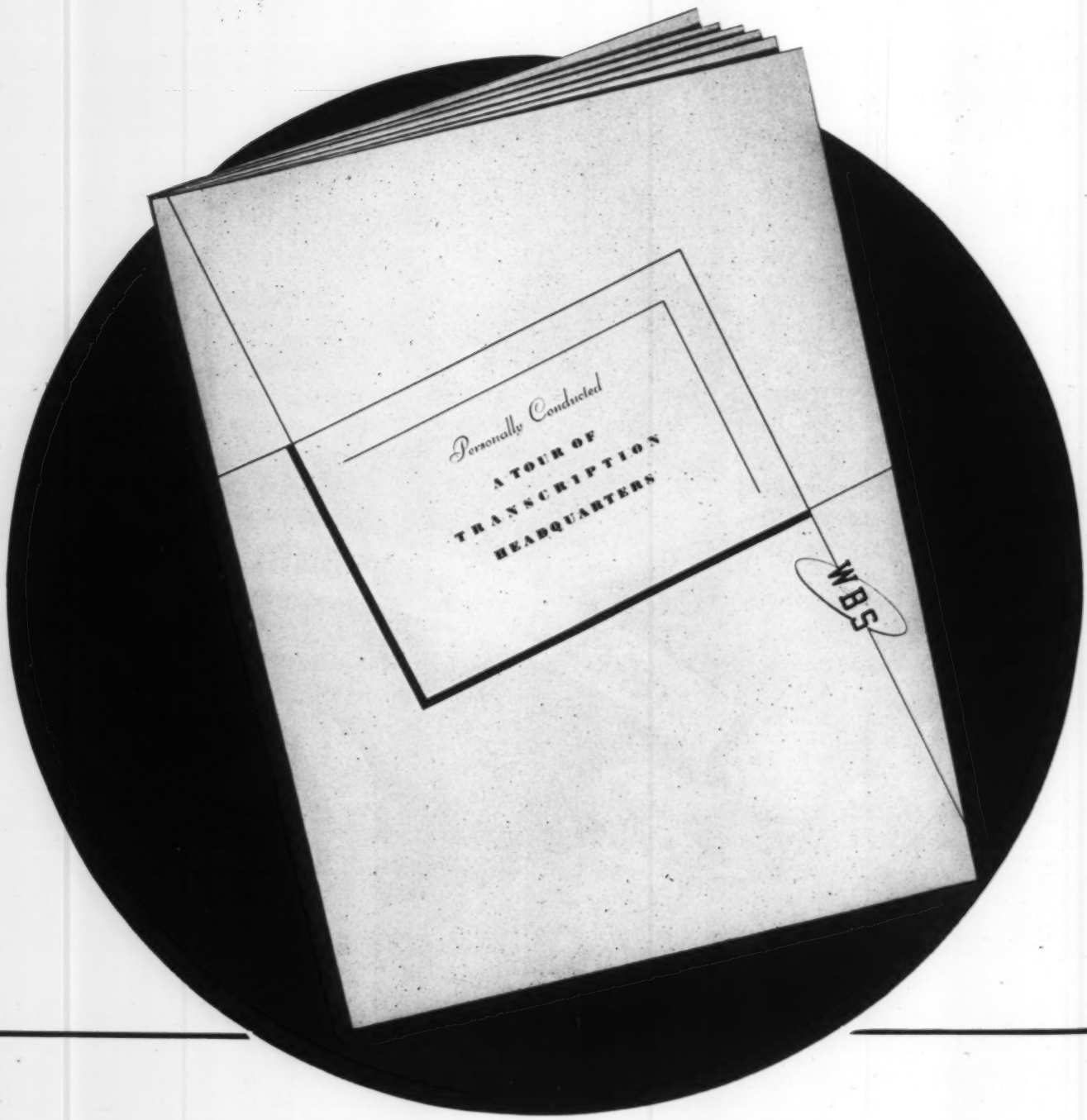
5 We pledge to our advertisers a tremendous and responsive audience of buyers—day and night—and programs which keep them tuned in

WHAS

Owned and Operated By The Courier-Journal and Louisville Times.

Louisville, Kentucky
CBS Basic Outlet
Represented by Edward Petry & Co.

TRANSCRIPTION



WORLD BROADCASTING

NEW YORK • CHICAGO • ATLANTA • LOS ANGELES

N HEADQUARTERS

is now identified *exclusively* with

WORLD BROADCASTING SYSTEM

• News of the first importance to the world of radio is the announcement that, effective July first, World Broadcasting System takes over the new recording studios and transcription processing plant (recently completed by Electrical Research Products, Inc.) occupying three floors at Transcription Headquarters.

Here are the largest and finest studios in the world, designed and engineered exclusively for radio recording, acoustically perfect, ready for efficient and convenient production of your radio presentation.

Transcription Headquarters contains also an elaborate processing plant for the speedy and precision-built production of the new Wide Range Vertical WBS discs — the only complete plant devoted entirely to radio transcription manufacture.

The skill of sound engineering reaches a new climax of performance in this complete service for recording, processing, pressing and distribution of WBS discs to more than 400 radio stations in America now broadcasting sponsored WBS programs.

You really ought to visit WBS and learn the whole story! Meanwhile, tour Headquarters in just a few minutes by reading the brochure pictured on the opposite page. It's interesting, informative, and profusely illustrated. Copy of this brochure will be sent to advertising agencies, advertising and sales managers and radio executives on request. Write WBS at Transcription Headquarters, 711 Fifth Avenue, New York City.

WBS

NG SYSTEM

OS ANGELES • SAN FRANCISCO

WBS facilities include: *expert production assistance*, when desired, for program building; *station relations division*, an aid in clearing time; *shipping division*, for punctual distribution of discs; in addition to the WBS sound engineers who produce your WBS recordings by the Wide Range Vertical process.

XUM

A Nation Turns to Songs--And Luckies Too

The 'Hit Parade' Turns Out to Be One of Biggest Hits Of Merchandising History as Contest Sweeps Nation

LUCKY STRIKE started something a few weeks ago with its Sweepstakes contest. Just what it started is a question for the future. Right now, though, a few facts are apparent. The more they are studied the more apparent they become. And the longer the Sweepstakes runs, the wider swath it sweeps. Judging by late June returns, it is just about tops among radio contests—which by this time may be gross understatement.

HARDLY two months ago, after American Tobacco Co. and Lord & Thomas had completed details of a prize contest for the *Lucky Strike Hit Parade* programs on NBC and CBS, first entry blanks were distributed to the public.

In six weeks the contest was drawing 200,000 entries a week and promised to increase at a rate that would far overshadow any prior contest on any medium.

Orders have been issued to Lucky Strike plants to speed up production schedules to meet an already growing demand.

The Luckies Sweepstake contest offers radio listeners a chance to pick the three ranking hit tunes (in correct order) to be played on *Hit Parade* programs the following week. All winners receive a carton of Luckv Strike cigarettes and a congratulatory card from the sponsor, as well as another entry blank with postage attached.

Entry blanks also are distributed through retail channels and have a business reply card attached for mailing of selections. Non-winners receive another entry blank with a "dope sheet" attached. This gives the winning selections of the past week and the week before.

By this means the entrant knows that the sponsor has received his entry and learns from the reply why he did not win a prize.

Mail by the Ton

SO FAST has the contest grown that on June 15, for example, American Tobacco Co. received 80,350 pieces of mail in the contest. All mail is addressed to the sponsor. Going out the same day were 10,220 cartons of Luckies consigned to Sweepstakes winners, each package insured. The outgoing mail bill alone that day was $2,650.

Behind the contest is the amazingly simple idea that listeners are interested in hit tunes and will readily enter a Sweepstakes that costs them nothing.

The sponsor provides everything necessary to enter the Sweepstakes except the will to write the selections and drop them in a mail box. No proof of purchase or mailing cost is involved and on each entry is printed: "This postcard is free—you need not buy anything to obtain it, nor to enter this contest of skill." A contestant submitting more than one entry in any week is disqualified to avoid "stuffing" the Sweepstakes. All entrants must certify that they are of legal age to receive the carton of cigarettes if declared winners.

At the end of six weeks, American Tobacco Co. had distributed 20,000,000 formal Sweepstakes entry blanks, using the mail and retail channels. Through the retail channels alone more than 250,000 per day were being distributed. Promotion is done exclusively through the *Hit Parade* programs on combined NBC networks Wednesdays, 10-11 p. m., and on CBS at 10-11 p. m. Saturdays. The programs feature straight dance music based on the 15 most popular tunes of the week. To determine these tunes the sponsor conducts surveys at a cost of $1,500 a week.

Sweepstakes entrants receive new blanks with a one-cent stamp attached in the East. First class postage in the Midwest and airmail from the Pacific Coast are provided, the sponsor footing all mailing costs. The mailing plan permits Western entrants to get their selections to New York in time for weekly selection of winners.

Blanks Are Changed

ENTRY blanks are changed each week. In the fourth week each card mailed to winners and non-winners contained two extra self-addressed postcards to be given to friends, a sort of modification of the chain letter idea.

For the fifth week the entry card contained a map showing towns in which Sweepstake winners reside. The map was a photographed reproduction, a pin being placed in each town, although one pin might represent a hundred or more winners. The map showed distribution of winners all over the country after five Sweepstakes weeks.

Here are some contest facts, at the end of the sixth week:

More than 450 men and women given employment in handling the incoming and outgoing mail.

Thirty-nine Civil Service clerks working full time at American Tobacco Co., who ordinarily would be part-time or substitutes.

Over 300,000 pounds of cardboard used in printing entry blanks.

Printing firm added 39 employes and new equipment.

Nearly 400 persons required to handle mail, working day and night shifts.

Thirty thousand feet of additional floor space rented by concern handling the mailing details.

Here are rules for "Your Lucky Strike Sweepstakes":

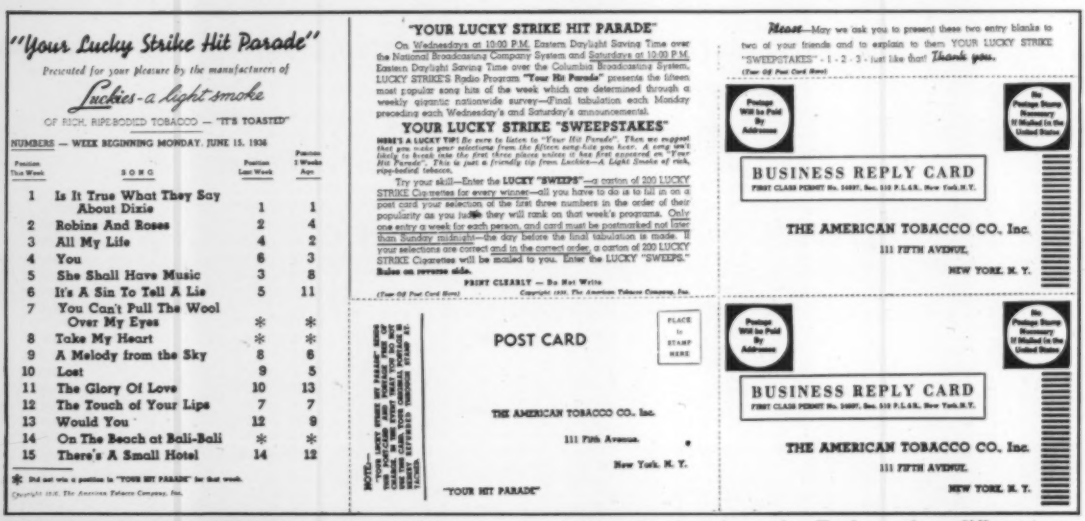
1.—Fill in on a post card the date, and print the names of the three songs you select in the order of their popularity, as you judge they will rank on the week's program: 1-2-3—just like that; and print your name and address clearly on your post card.

2.—The post card must be mailed to the American Tobacco Co., 111 Fifth Ave., New York, N. Y., and must be postmarked not later than Sunday midnight preceding the Wednesday and Saturday that the three leading songs are announced on *Your Lucky Strike Hit Parade.*

3.—Only one entrv for any one person each week—more than one entry in any one week disqualifies you for that week.

4.—This contest is not open to minors. You must be, and state that you are, of legal age to receive the prize.

5.—This contest is not open to employes of The American Tobacco Co. and affiliated companies, to its subsidiaries, or its advertising agents. By affiliated companies is meant any person, form or corporation that aids in making the national survey which forms the basis for the tabulation of the songs.



"Your Lucky Strike Hit Parade"

Presented for your pleasure by the manufacturers of Luckies—a light smoke

OF RICH, RIPE-BODIED TOBACCO — "IT'S TOASTED"

NUMBERS — WEEK BEGINNING MONDAY, JUNE 15, 1936

Position This Week	SONG	Position Last Week	Position 2 Weeks Ago
1	Is It True What They Say About Dixie	1	1
2	Robins And Roses	2	4
3	All My Life	4	2
4	You	6	3
5	She Shall Have Music	3	8
6	It's A Sin To Tell A Lie	5	11
7	You Can't Pull The Wool Over My Eyes	*	*
8	Take My Heart	*	*
9	A Melody from the Sky	8	6
10	Lost	9	5
11	The Glory Of Love	10	13
12	The Touch of Your Lips	7	7
13	Would You	12	9
14	On The Beach at Bali-Bali	*	*
15	There's A Small Hotel	14	12

* Did not win a position in "YOUR HIT PARADE" for that week.

Copyright 1936, The American Tobacco Company, Inc.

"YOUR LUCKY STRIKE HIT PARADE"

On Wednesdays at 10:00 P.M. Eastern Daylight Saving Time over the National Broadcasting Company System and Saturdays at 10:00 P.M. Eastern Daylight Saving Time over the Columbia Broadcasting System, LUCKY STRIKE'S Radio Program "Your Hit Parade" presents the fifteen most popular song hits of the week which are determined through a weekly gigantic nationwide survey—Final tabulation each Monday preceding each Wednesday's and Saturday's announcements.

YOUR LUCKY STRIKE "SWEEPSTAKES"

HERE'S A LUCKY TIP! Be sure to listen to "Your Hit Parade". Then we suggest that you make your selections from the fifteen song-hits you hear. A song isn't likely to break into the first three places unless it has first appeared on "Your Hit Parade". This is just a friendly tip from Luckies—A Light Smoke of rich, ripe-bodied tobacco.

Try your skill—Enter the LUCKY "SWEEPS"—a carton of 200 LUCKY STRIKE Cigarettes for every winner—all you have to do is to fill in on a post card your selection of the first three numbers in the order of their popularity as you judge they will rank on that week's programs. Only one entry a week for each person, and card must be postmarked not later than Sunday midnight—the day before the final tabulation is made. If your selections are correct and in the correct order, a carton of 200 LUCKY STRIKE Cigarettes will be mailed to you. Enter the LUCKY "SWEEPS." Rules on reverse side.

PRINT CLEARLY — Do Not Write

(Your Old Post Card Here)

Copyright 1936, The American Tobacco Company, Inc.

Please—May we ask you to present these two entry blanks to two of your friends and to explain to them YOUR LUCKY STRIKE "SWEEPSTAKES"—1-2-3—just like that! Thank you.

(Your Old Post Card Here)

Postage Will be Paid By Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD

FIRST CLASS PERMIT No. 36697, Sec. 510 P.L.&R., New York, N.Y.

THE AMERICAN TOBACCO CO., Inc.

111 FIFTH AVENUE,

NEW YORK, N. Y.

POST CARD

PLACE 1c STAMP HERE

THE AMERICAN TOBACCO CO., Inc.

111 Fifth Avenue,

New York, N. Y.

"YOUR HIT PARADE"

NOTE—MANY STORES SELL "HIT PARADE" SONG FOLIOS. FOR POSTAGE AND PACKING, SEND THE POSTCARD AND POSTAGE TWO OF THESE FOLIOS WILL BE SENT YOU. IF YOU LIVE IN THE U.S.A., YOUR CHOICE OF TWO SONG FOLIOS WILL BE SENT YOU, POSTAGE PREPAID.

Postage Will be Paid By Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD

FIRST CLASS PERMIT No. 36697, Sec. 510 P.L.&R., New York, N.Y.

THE AMERICAN TOBACCO CO., Inc.

111 FIFTH AVENUE,

NEW YORK, N. Y.

SONGS AND CIGARETTES—Dozens and dozens of thousands of these folders were mailed to those who entered the Lucky Strike Hit Parade Sweepstakes during the fourth week. Each week a different acknowledgment is sent to entrants. This one contained two extra entry cards to be given to friends.

Response to Ford Series Returns It to Net Sept. 20

CONCLUDING the current series of *Ford Sunday Evening Hours* on CBS June 21, announcement was made by Ford Motor Co. that the next series would commence Sept. 20 and would embody several changes during the 1936-37 season. Guest conductors will lead the orchestra, in contrast to this year's policy of having but one conductor, Victor Kolar. Conductors already engaged for the next season's programs include Fritz Reiner, Alexander Smallens, Jose Iturbi, Mr. Kolar, Eugene Ormandy and others.

Guest artists already engaged include John Charles Thomas, Kirsten Flagstead, Micha Elman, Gladys Swarthout, Lily Pons, Richard Crooks and a number of others. William J. Cameron will continue his weekly talks. It was announced by Mr. Cameron that the series, which has been presented over the coast-to-coast network of the CBS, has brought letter responses which often ranged as high as 2,000 a day. Next year's programs will go over CBS from Masonic Temple, whose seating capacity of about 4,000 will permit more persons to hear the broadcast than in Detroit's Orchestra Hall, scene of previous broadcasts.

Why HAS BUFFALO'S *NEW* STATION

UPSET *the* ENTIRE RADIO PICTURE *of* WESTERN NEW YORK ?

THE REASONS—

100% RCA high fidelity equipment
Blaw-Knox radiator
Finest tonal quality and reception
Consistent coverage in all directions

Full Transradio Press Service
Independent and aggressive
Programs that please
Maximum of music—minimum of talk

If you really want to get acquainted with the real Buffalo market—get acquainted with

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122 S. Benton Way
Los Angeles

Payment of ASCAP Royalties By Advertisers Again Proposed

Revision Is in Discussion Stage; Networks Opposed; ASCAP Back on Normal Basis in Washington State

POSSIBLE revision of the current five-year ASCAP contracts for performance of its catalog is again being discussed, with the trend currently toward revival of plans for royalties on commercial programs to be paid by the advertiser rather than the medium.

A number of important independent stations, it is reported, have discussed with E. C. Mills, ASCAP general manager, broad plans whereby the royalty formula would be changed. Stations thus would pay ASCAP a sustaining rate to be negotiated, with their advertisers paying direct to ASCAP, but with the broadcasters acting as the ASCAP agents. In other words, the broadcasters would certify to ASCAP the numbers used in given commercial programs and ASCAP then would bill the advertiser.

Two Types of Payment

TWO FORMS of payment are being considered, it is reported. One is for the advertiser to pay a predetermined rate for ASCAP music, related to the card rate of the station, under a blanket license. The other is upon a per composition, or per use basis for each advertiser.

Mr. Mills is known to have favored such a formula for some time. Prior to the formation of NBC in 1926, he has said, he dealt in that way direct with the advertiser.

Revival of this plan, which is simply in the conversation stage, evidently grows out of a combination of factors.

Many broadcasters from time to time are discussing with Mr. Mills possible new methods to substitute for the current five-year contract on which they pay 5% of receipts, plus a sustaining fee, and against which they have been complaining bitterly. Within the industry, some stations favor the advertiser-payment plan, and in certain areas stations are passing along the cost of music to the advertisers.

Major networks from the outset have opposed passing the cost to the advertiser. First, they are satisfied with their five-year contracts with ASCAP, which provide for payment of the 5% royalties only by the network key stations in New York and by their owned and operated stations. Moreover, the networks contend that the music cost always has been absorbed at the source; that it eventually would mean "per piece" and higher costs for music; that the tendency then would be to perform "cheap" music to reduce the costs, and depreciate program value, and finally that it would make it more difficult to sell radio time against competitive media.

With the return of Warner Bros. publishing houses to ASCAP believed imminent, it is felt in some circles that a change in formula would hasten that action. Warner steadfastly has maintained that the networks are not paying their just share of copyright royalties. Under the advertiser-payment formula the networks presumably would be taxed on the same basis as individual stations.

It is also known that Mr. Mills has been asked repeatedly by stations to revise the method of payment so that stations would pay a percentage — and a higher one than the 5% — on programs using ASCAP music, and not pay on the basis of all station revenue including script programs or programs using other than ASCAP music. Mr. Mills is opposed to such a formula, in general, it is indicated. He has expressed himself as believing this would entail great expense to stations in furnishing audited records as to music performed, to differentiate between ASCAP and non-ASCAP, and also would conceivably throw stations open to admissions of infringements in some cases.

Another new factor injected into the ASCAP picture is the recent passing of Nathan Burkan, general counsel and cofounder of the music group. Mr. Burkan and Mr. Mills have been the strong men of ASCAP. With the former's death, Mr. Mills is left in the key position. His views at times have been different from those of the late general counsel.

Selection of Counsel

SO FAR as known the newly created law firm of Schwartz & Frolich, which has succeeded Burkan & Frolich, will remain as ASCAP counsel. Charles Schwartz, youthful assistant to Mr. Burkan, is highly regarded as a copyright lawyer, and Mr. Frolich long has been identified with ASCAP trial work. There have been reports that Sol A. Rosenblatt, former NRA division administrator, and before that with an associate of Mr. Burkan, might become chief counsel, but no verification could be procured of this.

Mr. Rosenblatt is counsel for Associated Independent Radio Stations Inc., newly formed organization of leading independent stations, and his primary assignment to date has been to procure copyright legislation designed to protect the interests of users. He has had numerous conferences with Mr. Mills pertaining to AIRS business.

ASCAP officials are congratulating themselves on their victory in Washington state, where the Superior Court in Seattle on June 8 dissolved the receivership imposed last year. Mr. Mills took issue with the article published in the June 15 issue of BROADCASTING in which this dissolution was termed a "conditional settlement" contingent upon ASCAP doing business in accordance with the state law. A copy of the court order reveals that the settlement was not conditional. Mr. Mills also denied the statement, furnished by station representatives in Washington, that claims of an undetermined amount filed by users of ASCAP's work were compromised.

According to Mr. Mills, the straight five-year contracts at 5% are being offered stations in Washington state, following the same contractural form offered all stations as of Jan. 1, 1936.

"Convenience to Users"

IN A COMPLETE reversal of its former decision, the Court ordered that the complaint be dismissed "upon the merits". Among other things, Judge D. F. Wright concluded that ASCAP is necessary "to protect the performing rights of authors, composers and music publishers."

The Court found further that ASCAP is a convenience and a necessity to the users of music "who will be considerably embarrassed, impeded, delayed and put to considerable expense if they had to deal separately with each piece of music performed and with each owner of the performing rights of each such piece."

Whereas it previously had held that ASCAP conducted itself in a fashion that violated the state constitution, the Court in discharging the receivership said ASCAP "is not violative of any of the laws of the state of Washington, or of the Constitution."

The receiver, Tracy C. Griffin, of Seattle, was ordered to collect all amounts due from contract license users up to Dec. 31, 1935, except such users as paid direct to ASCAP, in respect of works of the present membership of ASCAP, and to transfer to ASCAP all properties which came into his possession by virtue of the receivership, except any money on hand and claims for money due to Jan. 1, 1936, less expenses.

Covering the Convention

MUCH the same technical setup and staffs used at the G. O. P. convention in Cleveland were mustered for the network broadcasts from the Philadelphia convention of the Democratic party. Here is a new wrinkle in remote coverage, however. CBS ace announcer Bob Trout strolls through the convention crowds with a micro-wave transmitter in a cane, a "wrist-watch mike" and a leather case containing the power amplifier. Note the "acorn" tube on the cane. The four networks—NBC, CBS, Mutual and Inter-City—broadcast the proceedings with WFIL, Philadelphia, having its own setup for local coverage. WIP fed to Inter-City.

Chrysler Signing Of Bowes Revises Choice Net Hours

CBS Quickly Gets Vicks and Texaco for Sunday Evening

WITH Maj. Bowes and his amateur hour, sponsored by Standard Brands for Chase & Sanborn Coffee, definitely scheduled to leave the NBC-Red network after the Sept. 13 program, a reshuffling of network programs for the fall and winter season, particularly Sunday nights, is in prospect. Maj. Bowes has been signed by Chrysler Corp., Detroit, for a new program to go on CBS late in September or early in October, handled by Ruthrauff & Ryan Inc., New York.

Whether the new Maj. Bowes show for Chrysler will be an hour or half-hour in duration has not yet been decided, nor has the time been picked, but tentative arrangements call for the Thursday 9-10 p. m. period — the same used by Plymouth on CBS for its Ed Wynn show last spring and by Chrysler for its Mark Warnow show last winter.

Chrysler plans contemplate using Maj. Bowes at dealer sales meetings for personal appearances. His salary is undisclosed since he handles all his own business deals.

Grabbed in a Hurry

CHASE & SANBORN's relinquishing of Maj. Bowes on the NBC-Red's Sunday 9-10 p. m. period immediately placed a premium on that hour on CBS, which quickly closed two accounts for it. Vick Chemical Co. took the first half-hour and Texaco the second. Vick will use Nelson Eddy with Josef Pasternak and orchestra; Texaco will feature Eddie Cantor, James Wallington, Bobby Breen, Parkyakakus and an unannounced orchestra.

The starting date for the Vicks show, handled by Morse International Inc., New York, has not been decided, but Texaco will start on Sept. 20. Both programs will originate from Hollywood and both will be carried over practically the entire CBS network.

Texaco also is planning to continue using Cantor at sales meetings, already having had him appear personally in a half dozen cities on his recent trip to Hollywood. Standard Brands, according to best reports, intends to hold the NBC-Red Sunday evening period, with the possibility that Rudy Vallee's variety show may be moved to it from its Thursday night hour on the same network.

New York radio circles recalled that Eddie Cantor last fall took on the Sunday, 8-8:30 p. m., period on CBS, but on Dec. 29 gave it up with the frank statement that Maj. Bowes was too strong to buck on the opposite network. Some observers are still skeptical whether the amateur idea will still hold the fancy of the radio audience, and it remains to be seen how Maj. Bowes will click for Chrysler in whatever new period is chosen for him.

SIGNOFFS for the summer vacation months were authorized June 20 by the FCC for WSVS, of Seneca Vocational High School, Buffalo, and KBPS, of Benson Polytechnic School, Portland, Ore.

Presenting WREC TO THE MID-SOUTH

MEMPHIS' MOST POWERFUL RADIO BROADCASTING STATION

THE VOICE OF MEMPHIS
Memphis' FIRST and ONLY Wide-Range, High-Fidelity Broadcasting Station

Increasing STRENGTH FROM 2,500 to 5,000 WATTS

BROADCASTING *Tower*

TWICE AS POWERFUL AS ANY OTHER MEMPHIS STATION
DOUBLES **WREC**'s *Coverage* AREA

WREC TAKES ANOTHER STRIDE AHEAD

At 12 o'clock noon, Sunday, June 14, WREC began broadcasting with 5,000 watts power.

On the strength of WREC's new improvements . . . the installation of its new wide-range, high-fidelity broadcasting plant—just completed at Radio Center—the Federal Communications Commission, granted WREC permission to increase its Broadcasting power to 5,000 watts.

WREC is the FIRST Memphis broadcasting station to use 5,000 watts power.

Tens of thousands of new listeners will be added to the WREC audience, who will enjoy wide-range, high-fidelity reception for the first time. Advertisers will derive a very definite and immediate benefit thru the wide expansion of WREC's coverage—a plus value—at NO increase in advertising rates.

WREC . . . . The FIRST and Only Memphis Station to use Wide-Range, High-Fidelity Broadcasting.
WREC . . . . The FIRST Memphis Station to use 2,500 Watts Power.
WREC . . . . The FIRST Memphis Station to use 5000 Watts Power

WREC

Tennessee's First and Memphis' Finest Radio Station

Affiliated With COLUMBIA BROADCASTING SYSTEM

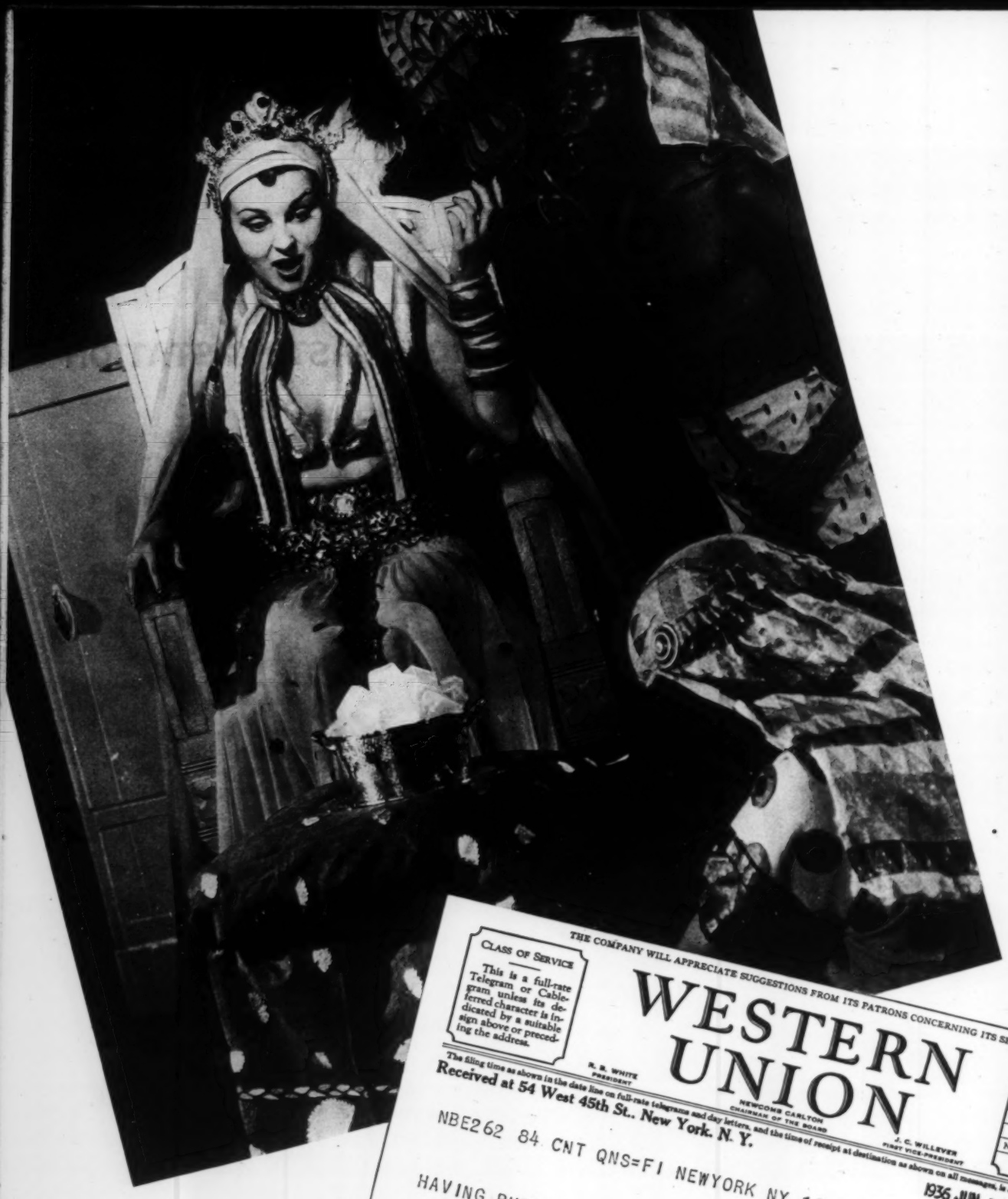
NATIONAL REPRESENTATIVES
PAUL H. RAYMER COMPANY

NEW YORK	CHICAGO	SAN FRANCISCO
336 Madison	435 Michigan	Russ Building

A PLUS VALUE FOR ADVERTISERS . . . . AT NO INCREASE IN RATES

WREC OUT IN FRONT . . and Taking Another BIG Step!

XUM



THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable sign above or preceding the address.

WESTERN UNION

1201-S

SIGNS

DL = Day Letter
NM = Night Message
NL = Night Letter
LC = Deferred Cable
NLT = Cable Night Letter
Ship Radiogram

NEWCOMB CARLTON
CHAIRMAN OF THE BOARD

J. C. WILLEVER
FIRST VICE-PRESIDENT

W. W. WHITE
PRESIDENT

The filing time as shown in the date line on full-rate telegrams and day letters, and the time of receipt at destination as shown on all messages, is STANDARD TIME.

Received at 54 West 45th St., New York, N. Y.

1936 JUN 19 PM 4 38

MINUTES IN TRANSIT

FULL-RATE	DAY LETTER

NBE262 84 CNT QNS=FI NEWYORK NY 19 356P

HAVING PHENOMENAL EXPERIENCE WITH YOUNG TRAVELER WHO PURPORTS TO BE PROJECTED BACK BY SOME GOD CALLED ELECTRUS FROM TWENTIETH CENTURY STOP HE TELLS ME OF AN AMAZING WONDER OF HIS WORLD CALLED RADIOPHILAE STOP AS HE SLEPT I FOUND ODD BIT OF PAPYRUS IN HIS TUNIC WITH CHARACTERS 'MY STAR GAZER INTERPRETS "ROOM 2104 5 6 7 STEVENS HOTEL CHICAGO" INVESTIGATE AT ONCE STOP HIS CONDUCT MOST AMUSING STOP HAS MY COURT IN UPROAR STOP I CANT MAKE HIM STOP=

QUEEN OF SHEBA.

THE QUICKEST, SUREST AND SAFEST WAY

What Happens to Spots--A Mortality Study

By C. E. MIDGELY Jr.
Radio Department, Batten, Barton, Durstine & Osborn Inc.

Stations Advised to Give Advertisers All That They Buy; Some Suggestions on Servicing National Business

Mr. Midgely

IT MIGHT be well for some broadcasters to put their spots on the spot, judging by some of the super-charged salt that "Ned" Midgley would rub into their wounded commercial schedules. As a placer of a lot of national business, the author is well-versed in the art of picking spots and has picked a few for special treatment in this article. He's not indicting the industry, of course—just focusing on several vulnerable places. And still better, he offers some specifics for the maladies.

A CLOSE analogy can be drawn between broadcasting and the railroads—up to a certain point. The average person hears more about the "Twentieth Century", the "Chief", and the "Broadway Limited" than he does about No. 18 or No. 97, fast freights which really produce the revenue for the line. Coast-to-coast network broadcasts make excellent "lead" programs for any radio station but it is the national spot and local programs which pay the freight.

Both industries are subject to the closest government scrutiny from their respective Commissions. Competition of the railroads comes from other lines and from other forms of transportation. Competition in broadcasting comes from other stations, or networks, and from other forms of advertising media.

Time is a vital element in each. On a railroad, it is possible for only one train to travel on a given section of track at one time, but in broadcasting—well, let us here divert from the analogy.

How Low Is Lowest!

IT WOULD seem that only one radio program could be broadcast by a station in a 15-minute period at any one time. Picture the distress of an advertiser who signed a contract with a local station for a long series of quarter-hour evening programs and discovered, three days before the start of the series, that another advertiser had been broadcasting in those periods for the past six months and had no intention of discontinuing. He had been led to believe that the station coveted his business.

He asked his agency "How come?" His agency asked the station representative "How come?" The representative asked the station the same question, perhaps a bit more strongly if he had secured an appreciable amount of business for that station recently. The answer came back from the station "Terribly embarrassed—an oversight—suggest the following alternate times." It all sounded so simple but what about the merchandising that had been done with distributors, dealers and the listening audience? All of the reasoning back of the selection of the original time, in competition with periods available on other stations, was thrown out.

Baseball is the great American sport. A play-by-play description of a game makes an excellent broadcast. Daylight Saving Time is the great American nuisance in broadcasting circles. Nevertheless it has been with us these many years and bids fair to continue for some time to come. How is it possible for a station manager to wire an acceptance of a 52-week schedule to his network in the morning and send out a salesman in the afternoon to sell daily sponsorship of the ball games for the 24 weeks of the baseball season? Again, the station was "terribly embarrassed" when Daylight Saving Time came along two weeks later and there were two programs scheduled for the same period.

An advertiser had a large schedule of spot programs to place in a Midwestern city. The competition narrowed down to two stations. All factors were considered by the advertiser and his agency and the choice was made. The other station was told that it would not get the business. Immediately thereafter it notified the agency that it had long been considering reducing the rates for that particular period and this could be the first account to profit by the change. On the basis of the new costs the consideration was reopened with the advertiser and the money saving was sufficient to change the selection of the station.

The next time the advertiser placed a spot schedule he asked his agency "Are you sure that these are the *lowest* rates you can get from the stations?" Thus was undone, in the mind of one advertiser at least, the constructive work that has been accomplished by the broadcasting industry in stabilizing rates over the past few years.

A series of 15-minute transcription programs was bought on an Eastern station. Program No. 10 had not arrived on the day of the broadcast and the station notified the recording company. The print had never been shipped so the station, without any word to the agency or the advertiser, repeated program No. 3.

Again, program No. 15 failed to arrive and the recording company was notified. This time the print had been shipped (probably by mule train) and it was too late to send a duplicate. The station repeated program No. 1. Quite casually, this information was transmitted to the station's representative some three weeks later. This was the first indication the agency and the advertiser had that the programs had not been broadcast on schedule. After all, the advertiser was only paying the bills so that there was really no necessity for letting him know that he was not getting what he bought.

A small advertiser had looked longingly at broadcasting for many years and been shocked at the station and talent costs that were quoted glibly on every hand. He recognized in broadcasting a medium that would do an admirable job for his product but, with spotty distribution, he knew that he could not afford a large radio campaign. Finally his agency suggested a series of dramatized, one-minute transcriptions to be broadcast in carefully selected day-time spots for 13 weeks. The cost fitted into his budget nicely and he showed more interest in this effort than in any advertising he had done for years.

Spotty Spotting

WITH pardonable pride, he sent announcements of the campaign and detailed schedules to his distributors and dealers. He asked his district sales manager to check on as many of the announcements as possible. During the first week, one station changed four of the announcements to spots immediately following a dull laxative program. Another station omitted two of the six announcements. Two other stations broadcast the wrong announcements.

All of these occurrences were reported by the district sales managers and not by the individual stations until several weeks later. After 13 such weeks, with one station after another making errors and changes in the schedule, this advertiser decided that the gamble in spot broadcasting was just about equivalent to the Irish Sweepstakes and abandoned it.

A toy manufacturer sponsored a series of juvenile recorded programs five days weekly and after eight weeks there was increasing evidence that the programs had built a large audience in the period just before 6 p. m. A mail test was planned for a Friday program.

A series of special newspaper ads was arranged and everyone had high hopes. Two days before the test one station requested the advertiser to move his program on that Friday to 9:15 p. m. in order that the annual dinner of the local Diabetic Alumni of the Foundling Hospital could be broadcast. The request did not indicate that the move was compulsory.

The advertiser gave it real consideration but advised the station, through his agency, that they had made extensive plans for that particular program and would appreciate it if they could delay the start of the dinner broadcast for 15 minutes. The day before the broadcast, word came back from the station that "due to local angles", the station felt compelled to broadcast the local dinner and the juvenile program would have to be broadcast at 9:15 p. m. or stay off the air entirely on that day. The program was not broadcast and the test in that area, in which the client did 30% of his business, was a total loss.

These incidents might appear to be trivial but they are typical of many others experienced by advertisers who have used spot broadcasting during the last few years. Such incidents can be due to nothing but carelessness and inefficiency. As a result, the complaint of the average advertiser is that spot broadcasting is too uncertain and that it is rare, indeed, when he actually obtains the broadcasting service which he originally purchased.

Some Commandments

THIS attitude should not be allowed to continue and grow in the minds of advertisers. Radio stations depend upon spot broadcasting for the bulk of their revenue and it should be accorded the attention to detail which it deserves. Many stations are doing an excellent job in handling their spot accounts but some careless stations pop up on every schedule and prejudice the whole industry.

Broadcasting has come far in a short time. Perhaps stations have paid too much attention to their new high-fidelity transmitters, television and facsimile experiments, copyright problems, regional network developments and publicity efforts to bother with a few of the fundamentals of sound business practice.

The first commandment for a radio station should be to deliver to an advertiser the exact service he orders.

The second, let the agency and the advertiser know in advance if it is necessary to make a change in any detail of his schedule. Agencies and advertisers are reasonable people to deal with. They realize that mistakes can occur occasionally and that there is justification for some changes in a schedule. They will meet a station more than half-way *if* they are advised before-hand. In a large percentage of cases, spot broadcasting is not undertaken as an isolated effort but rather as a part of a comprehensive campaign involving other media. Unwarranted changes in the broadcasting schedule throw the whole campaign out of kilter.

XUM

Census Gives Revenue for 301 Stations

Total Income Last Year of $27,651,196 From Sale Of Time Shown in Summary of Figures to Date

SUMMARY OF CENSUS DATA FOR SIX REGIONS

		Revenue From Sale of Time				Employment and Payrolls		
	No. Sta.	Total	Nat. and Reg. Adv.	Local Adv.	Sta. Employes (Avg.No.)	Station Payroll Total	Full-time	Part-time
New England	36	$3,664,687	$1,810,836	$1,853,851	727	$1,365,856	$1,262,327	$103,529
Texas	30	2,220,821	955,030	1,265,791	554	771,395	741,923	29,472
Pacific Coast	77	6,441,623	2,823,351	3,618,272	1,988	3,202,573	2,835,050	367,523
Mountain	42	1,760,684	684,101	1,076,583	436	634,160	578,635	55,525
Middle Atlantic	82	11,422,747	6,171,743	5,251,004	2,415	4,554,179	4,206,365	347,814
E. South Central	34	2,140,634	1,111,363	1,029,271	618	863,520	718,400	145,120
Total	301	$27,651,196	$13,556,424	$14,094,772	6,738	$11,391,683	$10,342,700	$1,048,983

WITH U. S. Census returns on its tabulation of revenue and employment of broadcast stations already covering six regions and some 301 stations, a recapitulation of this data by BROADCASTING shows that the 301 stations had income in 1935 of $13,556,424 from national and regional advertisers and $14,094,772 from local advertisers (see table).

The regions covered are New England, Texas, Pacific Coast, Mountain, Middle Atlantic and East South Central.

A summary of employment data shows that these stations employed an average of 6,738 persons last year, with total payrolls of $11,391,683. Fulltime employes were paid $10,342,700 and parttime workers received $1,048,983.

East South Central

TOTAL receipts of the 34 broadcast stations in the East South-Central States (Alabama, Kentucky, Mississippi and Tennessee), from sale of radio time during the year 1935, amounted to $2,140,634, it was revealed June 26 by Director William L. Austin, Bureau of the Census, Department of Commerce.

The report includes all broadcast stations in the four East South-Central States which sold time during 1935. There were 9 such stations in Alabama, 6 in Kentucky, 7 in Mississippi, and 12 in Tennessee.

About one-half (48.1%) of the receipts from the sale of time was derived from local advertisers. The remainder was received from national and regional advertisers who purchased time directly from the stations, and from national and regional networks as payment for network commercial programs carried by the stations.

Alabama's nine stations divided their reported time sales of $355,427 as follows: from local advertisers, $264,279; from networks and national and regional advertisers, $91,148. Station personnel totaled 110 persons, to whom was paid in 1935 a total of $167,876, about 97% of which was paid to full-time and 3% to part-time employes.

Kentucky's six stations reported that of their $748,336 total revenue from the sale of time, the amount received from local advertisers was $268,708 and the remainder, $479,628 was from networks and national and regional non-network advertisers. Station personnel totaled 138 persons, to whom was paid $241,365 in 1935, more than 77% of which was paid to full-time employes.

Mississippi's seven stations divided their reported time sales of $135,763 as follows: from local advertisers, $66,138; from networks and national and regional spot advertisers, $69,625. Station personnel totaled 48 persons, to whom was paid in 1935 a total of $45,600.

Tennessee's 12 stations reported that of their $901,108 total revenue from the sale of time, the amount received from local advertisers was $430,146, and the remainder, $470,962 was from networks and national and regional non-network advertisers. Station personnel totaled 322 persons, to whom was paid $408,679 in 1935, more than 79% of which was paid to full-time employes.

The total receipts of 82 broadcast stations in the Middle Atlantic States, from sale of time in 1935 were $11,422,747, the U. S. Census Bureau announced June 24.

The report includes all broadcast stations in the three Middle Atlantic States which sold time and were in operation Dec. 31, 1935. There were 10 such stations in New Jersey, 39 in New York, and 33 in Pennsylvania.

Less than half (46%) of the time sales in the three States was derived from local advertisers, and the remainder from national and regional advertisers. Because the breakdown of this figure as between network and non-network programs is impossible for New Jersey without disclosure of individual figures, the regional totals are also combined, but are shown separately for New York and Pennsylvania in the tables.

Employment Data

ALMOST a half (48.5%) of the total time sales of stations in the three Middle Atlantic States was accounted for by New York stations. Total time sales of these 39 stations amounted to $5,546,064 of which $2,625,439 (47.3%) was local advertising. Pennsylvania stations were second with $3,484,647 revenue from the sale of time, and New Jersey last with time sales of $2,392,036.

Revenue as reported by the stations is the net billings for advertising time on the air, including the stations' proportion of network billings. It is computed after deducting quantity and time discounts.

The 82 Middle Atlantic stations employed a total of 2,415 persons (monthly average) with an annual pay roll in 1935 of $4,554,179. More than 92% percent of this pay roll was paid to full-time employes. The monthly fluctuation in station employment was slight in 1935. The number of persons employed ranged from a low of 2,273 in January to a high of 2,539 in October. The high point of employment in October represented an increase of 11.7% over January. The greatest change in employment, for any two months period, amounted to about 5%.

During a representative week used for more detailed analysis of employment and pay rolls, a total of 2,537 full-time and part-time employes was reported. Of this number 2,029 (or 80%) were men and 508 were women. Part-time employes accounted for 20% of the number and received 7.9% of the total pay roll.

	No. Sta.	Sta. Em.[1]	Station Pay Roll (in dollars) Total	Full-time	Part-time
Mid.Atl.	82	2,415	4,554,179	4,206,365	347,814
			100%	92.36%	7.64%
N. J.	10	250	672,084	654,894	17,190
N. Y.	39	1,308	2,386,687	2,210,683	176,004
Pa.	33	857	1,495,408	1,340,788	154,620

[1] Monthly average, based on number of full-time and part-time employes on pay roll nearest the 15th of each month. (Total man-months divided by 12.)

REVENUE FROM SALE OF TIME

	No. Sta.	Total	Nat'l Reg. Net.[1]	Nat'l Spot	(non-net.)[1]	Local[1]
Middle Atlantic States	82	$11,422,747		$6,171,743		$5,251,004
		100%		54.03%		45.97%
New Jersey	10	2,392,036		1,419,701		972,335
		100%		59.35%		40.65%
New York	39	5,546,064	1,694,356	1,226,269		2,625,439
		100%	30.55%	22.12%		47.33%
Pennsylvania	33	3,484,647	780,485	1,050,932		1,653,230
		100%	22.40%	30.15%		47.45%

[1] National and regional network revenue represents the amount received by stations from networks as payment for network commercial programs carried by the stations. National spot revenue represents time sold directly by stations to national and regional advertisers rather than through a network. Local advertising revenue was received from local advertisers who purchased time directly from stations.

[2] National and regional network and non-network data combined for New Jersey (and the Regional total) to avoid disclosure of individual figures.

	No. Sta.	Total	Nat'l Reg. Adv.[1]	Local Adv.[2]
East South-Central States	34	$2,140,634	$1,111,363	$1,029,271
		100%	51.91%	48.09%
Alabama	9	355,427	91,148	264,279
Kentucky	6	748,336	479,628	268,708
Mississippi	7	135,763	69,625	66,138
Tennessee	12	901,108	470,962	430,146

[1] National and regional advertising represents the amount received by stations from networks as payment for network commercial programs carried by the stations as well as time sold directly by stations to national and regional advertisers. Data showing the amounts received from network and non-network time sales are combined to avoid disclosure of individual figures.

[2] Local advertising revenue was received from local advertisers who purchased time directly from stations.

Employment, Pay Rolls—Middle Atlantic States[1]

	All Employes[2] (One Week) No.	Pay Roll	Full-time Employes Pay Roll No.	Total	Avg.	Part-time Employes Pay Roll No.	Total	Avg.
Total	2,537	$91,023	2,029	$83,829	$41	508	$7,194	$14
Executives	83	9,744	78	9,520	122	5	224	45
Supervisors	117	8,689	117	8,689	74			
Office and Clerical	458	10,709	447	10,610	24	11	99	9
Station Technicians	517	19,876	487	19,382	40	30	494	16
Station Talent:								
Artists	693	19,916	347	15,229	44	346	4,687	14
Announcers	296	8,713	268	8,345	31	28	368	13
Other[3]	373	13,376	285	12,054	42	88	1,322	15

East South Central States[1]

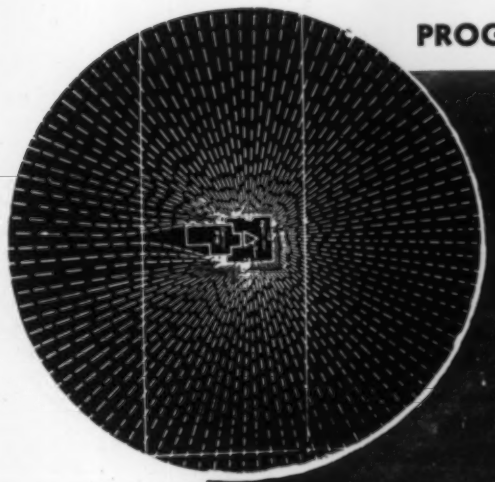
Total	600	$16,632	425	$13,948	$33	175	$2,684	$15
Executives	30	2,879	26	2,868	110	4	11	3
Supervisors	34	1,961	34	1,961	58			
Office and Clerical	62	1,244	60	1,230	21	2	14	7
Station Technicians	110	3,308	108	3,297	31	2	11	6
Station Talent:								
Artists	191	3,575	42	1,013	24	149	2,562	17
Announcers	89	2,178	83	2,132	26	6	46	8
Other[3]	84	1,487	72	1,447	20	12	40	3

[1] Figures are for week ending Oct. 26, 1935, except where such period was not representative. In such cases one week of representative employment is given.

[2] Does not include employes such as entertainers and other talent supplied by advertisers, nor employes of radio networks.

[3] "Other" includes employes not otherwise classified. Persons performing a variety of functions where no one function requires a major portion of the employe's time, and continuity writers, are included here. Salesmen are also listed as "other".

THE LAST WORD
IN
PROGRAMS • POPULARITY • EFFICIENCY • FIDELITY



Sketch showing WCLO's new transmitter house, radiator antenna and ground system, consisting of 5 miles of 1"–28 gauge copper ribbon buried 12" supplemented by 48' square copper net directly beneath tower.

THE MODERN RADIO STATION

1st local station to install 3rd wave Truscon Radiator Antenna. Highest efficiency from 5 acre ground system to capacity crown of 260 foot tower.

1st station to install Western Electric's latest type —High Fidelity 250 watt transmitter. Highest fidelity from new dynamic microphones.

Complete High Fidelity Speech Input installation specially designed for WCLO by Collins.

One of first stations to install the new 70-A RCA High Fidelity 78 and 33-1/3 turntables.

Three modern studios — $10,000 studio organ — NBC Thesaurus Programs — member of Affiliated Broadcasting System—efficient staff—merchandising service—responsive audience.

WCLO serves one of the richest markets in the entire United States.

Write for information.

Federal Communication Commission Grants WCLO Increase in Power to 250 Watts L.S.

This full time station to put all new high fidelity equipment into operation August 1st.

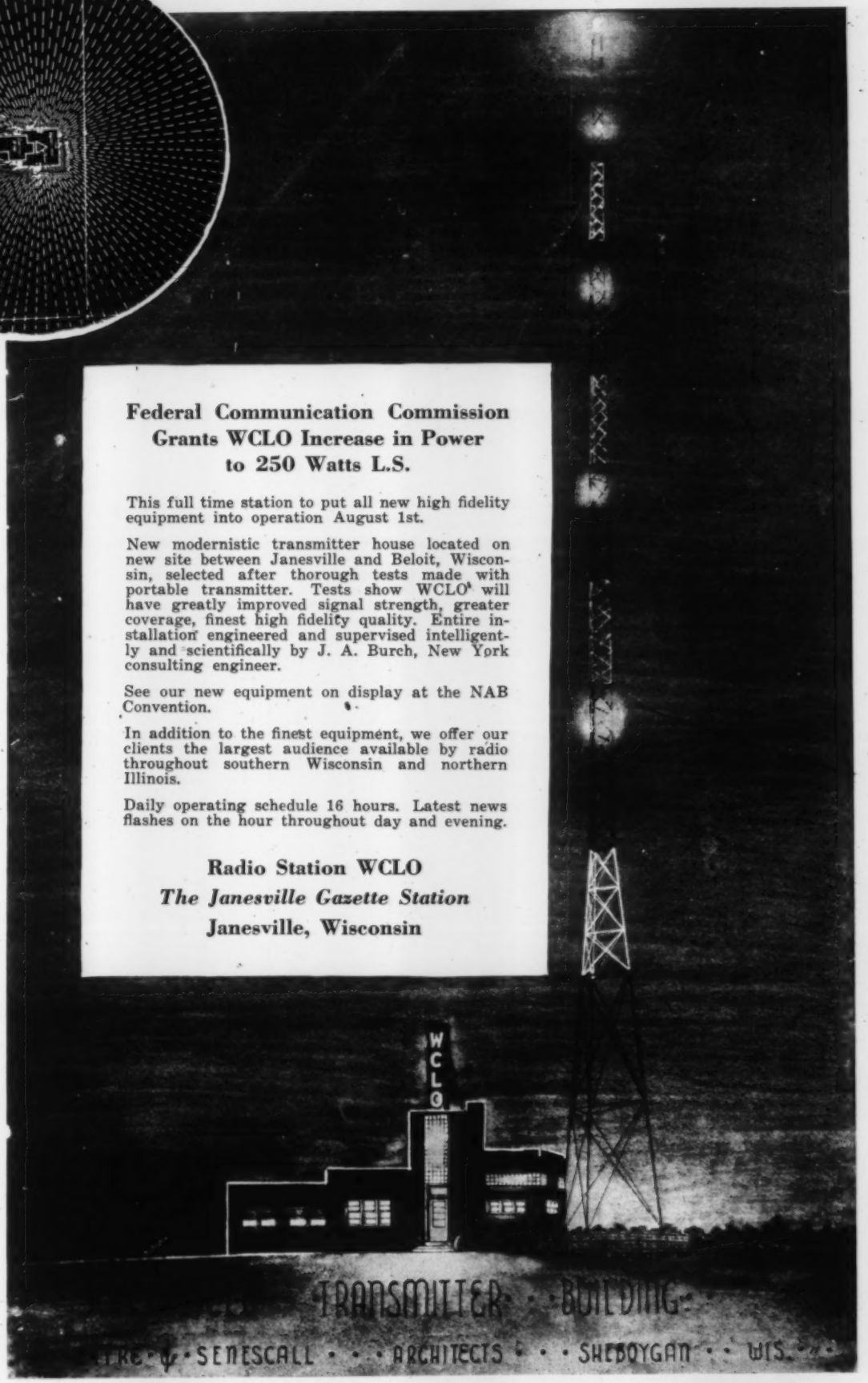
New modernistic transmitter house located on new site between Janesville and Beloit, Wisconsin, selected after thorough tests made with portable transmitter. Tests show WCLO will have greatly improved signal strength, greater coverage, finest high fidelity quality. Entire installation engineered and supervised intelligently and scientifically by J. A. Burch, New York consulting engineer.

See our new equipment on display at the NAB Convention.

In addition to the finest equipment, we offer our clients the largest audience available by radio throughout southern Wisconsin and northern Illinois.

Daily operating schedule 16 hours. Latest news flashes on the hour throughout day and evening.

Radio Station WCLO
The Janesville Gazette Station
Janesville, Wisconsin



Cigarette Leaders Stay on Networks During the Summer

Maintain Schedules as Battle For Business Continues

FOUR out of five of the leading cigarette manufacturers are broadcasting regularly scheduled programs on national networks throughout the summer. The only major company missing from the air is P. Lorillard Co. (Old Gold cigarettes, Brigg's smoking tobacco) which has not been using network time since the first of the year.

Old Gold, however, is using a few spot programs as are a number of cigar manufacturers, notably Webster-Eisenlohr Inc. which currently has spot campaigns running on 21 stations in the Midwest and East. United States Tobacco Co. (Dill's Best and Model smoking tobacco) is heard this summer on CBS in a half-hour Monday program.

In the past it had been the custom of R. J. Reynolds Tobacco Co. (Camel cigarettes, Prince Albert tobacco) and Liggett & Myers Tobacco Co. (Chesterfield cigarettes, Granger tobacco) to sign off before July 1, but this year such is not the case. Some revisions in talent and program schedules have been made but no curtailment of time occurred.

Camels, formerly using two weekly half-hour programs on CBS Tuesday and Thursday nights, has changed talent and time schedule. Instead of the two programs each week the sponsor is presenting a full-hour program on 86 CBS stations every Tuesday night, 9:30-10:30, from Hollywood, featuring guest artists, Nathaniel Shilkret and Benny Goodman's orchestras, with Rupert Hughes, novelist, as master of ceremonies. The program retains its old title, *Camel Caravan*, and is being produced by Sam Moore, radio director of William Esty & Co., who is now located on the West Coast.

Chesterfield Change

CHESTERFIELD continues on the same CBS schedule but on July 1 a change in talent was made. Chesterfield is heard Wednesdays, 9-9:30 a. m., on 92 stations and Friday on 93 stations, 10-10:50 p. m. During the winter months Nino Martini and Lily Pons, Metropolitan Opera stars, each had one of the two broadcast periods, but on May 1 Ray Heatherton, Kay Thompson, The Rhythm Singers, and Andre Kostlanetz's 45-piece orchestra began a dance program in the new Friday period (originally Saturday). Chesterfield has just announced that due to listener response it has scheduled dance music for the Wednesday program also, replacing Lily Pons after July 1. Newell-Emmett Inc., New York, handles the account.

The fact that the American Tobacco Co. (Lucky Strike cigarettes) is using twice as much radio time as either Chesterfield or Camels for their summer schedule may have influenced the competitors to stay on the air throughout the warm months. Luckies *Your Hit Parade* is broadcast Wednesday nights, 10-11, on 87 combined NBC-Red and Blue network stations and Saturday nights at the same time on 94 CBS stations.

The answer one agency gave when asked why its account remained on the air this summer was: "We want to sell more cigarettes".

American Tobacco is running a radio Sweepstake contest (details on another page) in conjunction with its radio programs, which feature dance music based on the 15 top tunes of the week with Carl Hoff's orchestra on the NBC hour and Freddie Rich's orchestra on CBS.

Philip Morris & Co. Ltd. (Philip Morris cigarettes), challenger for fourth position in the cigarette field (now held by Old Gold) will continue its musical program with Leo Reisman's orchestra on the NBC-Red network right through the summer. This program has been continuously on NBC since April 1933. Philip Morris also has a spot program on WOR, Newark.

According to the latest reports Camels rank first in consumer acceptance, Chesterfield second, Luckies third, Old Gold fourth and Philip Morris fifth. Camels and Chesterfields have been exclusive CBS accounts, with Philip Morris using both networks within the past year, a larger portion of the radio business being booked through NBC. The last program sponsored by Old Golds was *Thornton Fisher's Sports Review* on an NBC-Red network last fall.

WDBJ, Roanoke, Va., celebrated its 12th anniversary, on June 20, with the opening of their new studios and transmitter.

Receipts of NBC-Red and CBS Nets Again Reach Record Levels for Month

MAY BILLINGS recorded of CBS and NBC - Red networks again reached new all-time high levels for the month, CBS having $1,749,517 and NBC - Red reporting $1,654,246. For CBS this is an increase of 35.9% over May, 1935 and the highest percentage increase recorded by CBS this year. The NBC-Red, likewise, continued to show percentage increases for every month this year as compared with the same months in 1935. For May an increase of 2.4% over the same month last year was registered. The NBC-Blue network fell off 9.5% as against the May 1935. Billings this year were $911,674 as compared with $1,007,931 last year. Compared with April NBC-Red billings were off 6.1%, Blue 6.9%. Combined network totals for NBC were $2,565,920, a seasonal loss of 6.4% against the previous month.

Mutual Broadcasting System billed $129,907 during the month of May against $139,934 for the previous month, April. These figures include both the basic and associated stations. Basic network income for May was $108,369 as compared with April billings of $173,117.

Networks' Gross Monthly Time Sales

	1936	% Gain Over 1935	1935	1934	1933
NBC-WEAF (Red)					
January	$1,755,394	1.5	$1,729,137	$1,309,662	$1,031,373
February	1,691,524	4.4	1,620,977	1,215,998	908,531
March	1,913,837	6.1	1,802,741	1,374,910	1,028,935
April	1,762,201	6.3	1,656,283	1,355,587	809,508
May	1,654,246	2.4	1,614,969	1,441,900	816,665
CBS					
January	$1,901,023	7	$1,768,949	$1,405,948	$941,465
February	1,909,146	15.4	1,654,461	1,387,823	884,977
March	2,172,382	18.7	1,829,553	1,524,904	1,016,102
April	1,951,397	20.8	1,615,389	1,371,601	775,487
May	1,749,517	35.9	1,287,455	1,255,887	624,256
NBC-WJZ (Blue)					
January	$926,421	—15.3	$1,093,749	$988,503	$752,052
February	1,015,624	— 5.2	1,072,136	902,866	744,209
March	1,122,516	— 2.8	1,156,032	1,028,552	859,572
April	977,175	+.1	975,970	924,623	783,898
May	911,674	— 9.5	1,007,931	926,880	761,231
MBS					
January	$157,720	...	...	...	...
February	162,358	...	...	...	...
March	191,482	...	...	...	...
April	139,934	...	...	...	...
May	129,907	...	...	...	...

Texas Co. Starting Discs On Stations in Northeast

IN ADDITION to engaging the nationwide CBS network for Eddie Cantor and troupe Sundays, 8:30-9 p. m., starting Sept. 20, Texas Co., New York (gas and oil) announces that early in July it will launch its *Unsolved Mysteries* transcription series on eight New York and New England stations.

The programs will be heard three times weekly for 13 weeks, being the same series now used in the South where the campaign terminates in mid-July. The program was produced by American Radio Features Inc., Los Angeles, and sold to the sponsor by Conquest Alliance Co., New York. The stations included in the new schedule are WTIC, Hartford; WRDO, Augusta; WLBZ, Bangor; WCSH, Portland; WBZ - WBZA, Boston-Springfield; WJAR, Providence; WHEC, Rochester. Hanff-Metzger Inc., New York, handles the account.

KGFW in New Hands

TRANSFER of the stock of the Central Nebraska Broadcasting Co., operator of KGFW, Kearney, Neb. 100-watter, to Clark Standiford, local real estate operator, and Kate S. Fisher, was authorized by the FCC in June. The corporation previously was 48% owned by Hugh R. Brown, publisher of the *Kearney Daily Hub*, and 35% by Anna H. McConnell, wife of the station's chief engineer.

Coverage Research Material Is Sought

Joint Committee Asks Stations For Data on Their Audiences

Mr. Peter

AS THE FIRST step toward formulation of proposed plans for the creation of a radio research bureau to serve cooperatively the three branches of broadcast advertising, Paul F. Peter, secretary of the Joint Committee of Fifteen, is seeking from stations, advertisers and agencies all researches bearing on the questions of coverage of stations and listener habits now in use. Letters to the memberships of the NAB, Association of National Advertisers and American Association of Advertising Agencies were sent out beginning June 24, together with copies of a questionnaire devised by Mr. Peter.

Formerly chief statistician of RCA and before that with NBC, Mr. Peter has established offices in the Graybar Bldg., New York, where he will conduct the activity for the Committee of Fifteen, which is equally representative of the NAB, ANA and AAAA. The Committee named Mr. Peter to the secretaryship at its last meeting on May 14, and gave him broad authority to devise plans for setting up a cooperative bureau which would be the radio counterpart of the Audit Bureau of Circulations in the publications field.

To Be Confidential

JAMES W. BALDWIN, NAB managing director, in a covering letter to stations on the first undertaking by Mr. Peter, explained that Mr. Peter was selected after thorough canvassing of qualified experts available and received the unanimous approval of the Joint Committee.

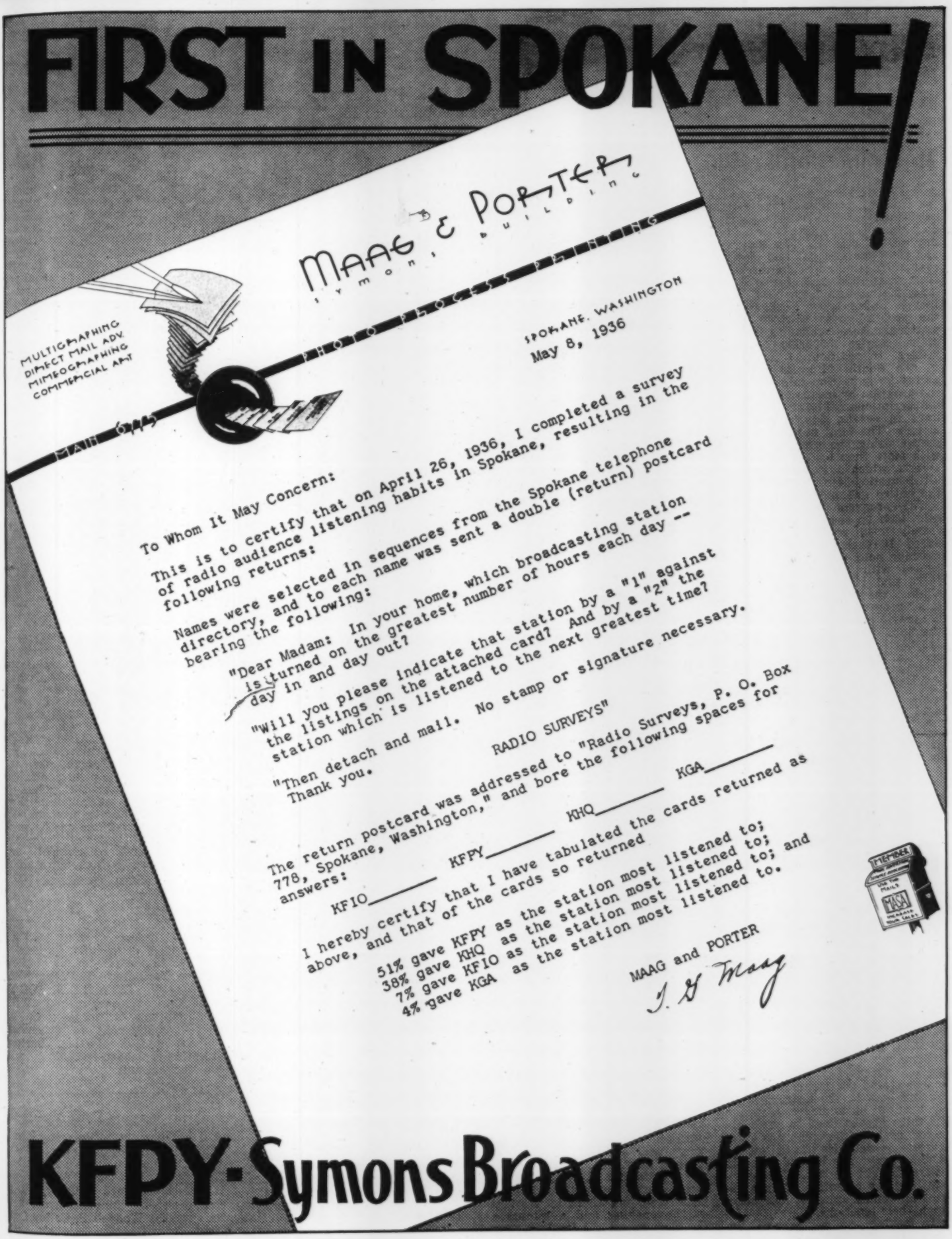
"Mr. Peter," his letter continued, "has called upon your managing director to assist him in securing from you any researches which your station has conducted, together with the exact manner in which the information was collected, compiled and interpreted. In order to give Mr. Peter the cooperation which is due him, it will be necessary to furnish in as complete detail as possible, the material on which final reports or summaries were based."

The information collected by Mr. Peter from stations, agencies, advertisers and research organizations, it was made clear, will be held strictly confidential and will be used solely to determine proper methods which should be employed in collecting authentic basic data by the medium as a whole.

New Station Ordered

A NEW station in Valley City, N. D., to operate on 1500 kc., with 100 watts unlimited time, was authorized June 20 by the FCC Broadcast Division to George B. Bairey. The FCC sustained the recommendation of Examiner M. H. Dalberg, and made the order effective July 14.

FIRST IN SPOKANE!


MAAG & PORTER
SYMONS BUILDING
PHOTOGRAPHING
MULTIGRAPHING
DIRECT MAIL ADV.
MIMEOGRAPHING
COMMERCIAL ART
SPOKANE, WASHINGTON
May 8, 1936
To Whom It May Concern:
This is to certify that on April 26, 1936, I completed a survey of radio audience listening habits in Spokane, resulting in the following returns:
Names were selected in sequences from the Spokane telephone directory, and to each name was sent a double (return) postcard bearing the following:
"Dear Madam: In your home, which broadcasting station is turned on the greatest number of hours each day -- day in and day out?
"Will you please indicate that station by a "1" against the listings on the attached card? And by a "2" the station which is listened to the next greatest time?
"Then detach and mail. No stamp or signature necessary.
Thank you.
RADIO SURVEYS"
The return postcard was addressed to "Radio Surveys, P. O. Box 778, Spokane, Washington," and bore the following spaces for answers:
KFIO_____ KFPY_____ KHQ_____ KGA_____
I hereby certify that I have tabulated the cards returned as above, and that of the cards so returned
51% gave KFPY as the station most listened to;
38% gave KHQ as the station most listened to;
7% gave KFIO as the station most listened to; and
4% gave KGA as the station most listened to.
MAAG and PORTER
J. G. Maag

KFPY-Symons Broadcasting Co.

Gas Industry Combines Discs and Networks

By CHARLES W. PERSON
Secretary, Regional Advertisers Inc.

With 125 Local Gas Companies Serving Six Million Meters In Households, Program Is Producing Excellent Results

MORE and more, individual industries are gathering together their far-flung units and concentrating on their public with radio programs. Particularly is this true in the case of industries serving household needs. The Mystery Chef program is producing in a big way, as Mr. Persons explains in this article, based on a speech he delivered June 30 at the Public Utilities Advertising Association session, held in connection with the Advertising Federation of America convention. The Mystery Chef has promoted distribution of more than 600,000 recipe books to consumers who have heard him.

A FEW DAYS ago we completed the first six months of our series of fifteen-minute radio talks by *The Mystery Chef* (NBC-Red, Friday, 10:30 a. m.). One hundred and four gas and electric companies situated in the territory from Washington, D. C., to Portland, Maine, and from New York City to Buffalo, New York, receive the program over thirteen radio stations. These companies have in active service 5,500,000 domestic meters. In addition, 21 companies in the South, Midwest and one as far away as Honolulu are using the program by means of electrical transcriptions. These companies have in service 550,000 domestic meters. The total number of companies using the program is 125, with more than 6,000,000 domestic meters, which amounts to 40% of all domestic meters in service by the entire gas industry.

The program has consistently sold itself on the basis of the uniformly good results it has produced. It reaches homes during the morning hour when women are occupied with the usual household tasks and it is holding its own against the strong competition of other programs directed to sell the housewife nearly everything under the sun. Some of these morning programs are elaborate, ingenious and costly, and several offer free samples and other gifts to hold the listener's interest.

All About Cookery

NO SPECIAL lure or offer is injected in *The Mystery Chef* program. It is a forthright exposition on cookery, the presentation of the many traditions associated with home-prepared meals, and a description of the conveniences, economies and certain results to be obtained from the latest models of gas ranges. The program has not been locally promoted on an extensive basis by any company but has been allowed to stand on its own legs, so to speak, and gather its own momentum unaided. The participating companies, to quote one of them, are primarily interested in this activity because they believe that "something is being said, something is being done, something is being accomplished along the proper educational line to impress modern gas cookery favorably in the minds of home makers."

Because of previous experience on the radio, the last four years of which were highly productive in building up a large public following of women, *The Mystery Chef* has mastered the technique of appealing both to the hearts and to the heads of his audience. Although his talks are confined in the main to gas cookery they embrace other matters as well. He has discovered that no program wholly devoted to instruction in the art of cookery can hold the attention of an audience of women unless it also plays upon their emotions.

In looking over the advance radio scripts of this program the average gas utility man would doubtless recommend that less should be said about mother love, the sustaining value of a religious faith, the training of children, specific recommendations for a happy married life, etc., and more said about the superior results of modern gas cookery. The mail response from listeners tells a pretty convincing story however. This response is always larger—and so are the requests for the recipe book—following a talk with strong heart appeal. His ability to hold his audience and to gain new listeners is due in no small degree to his gift of delivering a message which has an uplifting effect on women, plus his sincere enthusiasm for tasty and wholesome home cooking—an enthusiasm which rings true over the radio because it is genuine.

One great advantage of radio is its flexibility. For example: The talk regularly scheduled for Friday, May 8—two days previous to Mothers' Day—was discarded the night before for a new script with a strong Mother's Day message in it. This brought a large volume of complimentary mail. It is possible with radio as it is used on this program to change scripts as late as five minutes before they are used. The field is wide open. We must be careful not to infringe upon the sensibilities of the censorship authorities, but aside from this there are no rules other than the universal one of good taste. During the recent flood emergency, the Chef changed several of his scripts and mentioned the heroic work performed by gas company employees in the maintaining of gas service. The broadcasts, therefore, are timely, newsy and strictly up to the minute.

Another example of the flexibility of radio is the ability of companies using electrical transcriptions to prepare their own commercial announcements for local broadcast use. The recordings we offer for rental are about thirteen minutes in length and cannot be altered, but there is a minute at the opening and a minute at the close where the local gas company can announce its latest appliance selling activities and other developments of community interest.

In far away Honolulu, to give a concrete example, the announcer opens the broadcast with the statement that the famous *Mystery Chef* is about to talk personally to all customers served by the Honolulu Gas Co. and that this is the only occasion on which he talks to gas users outside of the United States. This sort of announcement has gained a wide audience in Honolulu for the program.

A Child Can Do It

ONE OF the most effective statements emphasized over and over again by the Chef is that any child ten years of age who uses his recipes and has a strictly modern gas range equipped with all the modern conveniences can immediately, without prior experience at cooking, prepare delicious food products. No statement such as this can be made over and over again on any radio program without having listeners put it to the test. This is exactly what the Chef has wanted his listeners to do and they have done it in large numbers—not only children but women who have never cooked anything before, and those who have wanted to cook but have lacked the determination to tackle it.

Thousands of listeners have written saying that the Chef's claims for easy cooking on a modern automatic, insulated gas range are all that he says they are. One of the best evidences of this we have on hand is the recipe for a fully planned meal to be prepared by men of the family who have never cooked before. More than 3,000 requests were made at the offices of gas companies for this particular recipe as the result of one broadcast, and hundreds of letters followed from male members of the family stating that they were successful in preparing the entire meal single-handed, despite the good-natured kidding they received from other members of the family.

In the near future we propose to check up carefully on what the program has been able to do in stimulating the sale of gas ranges and other domestic appliances. We know the program has stimulated the sale of gas ranges because such sales have been reported, and we also know the program has had a beneficial effect, even though small, on sales of gas for cooking. The volume of requests for the recipe book made by personal call at the office of gas companies is one means of checking up on the effectiveness of the program. To date, more than 700,000 recipe books have been distributed by Regional Advertisers Inc., sponsors of the program, to participating companies. Perhaps 600,000 of these 700,000 books are actually in the hands of customers. One million books have been printed.

In September of this year the American Gas Association, in behalf of several hundred companies, will launch a cooperative advertising effort of national proportions—the first of its kind ever to be promoted. Magazines of national circulation will be used and local operating companies will tie-in their efforts by newspaper advertising.

The *Mystery Chef* will, of course, tie-in his radio talks with the national drive. He will refer in detail to the text of the advertisements; will mention the issues and page numbers of the magazines, and will seize every opportunity to create interest in the advertising program by utilizing the many ways offered by radio. At the outset of this national program, therefore, the gas industry will reach an audience of 14,000,000 through magazines, and the Chef's talks will be available to 8,000,000 radio sets, exclusive of automobile sets. The combination of the two—the printed word and picture plus the spoken word over the radio—is ideal, offering, we believe, unlimited opportunities to promote public acceptance of gas as the modern, efficient fuel for all household, industrial and commercial purposes for which heat is required.

Niagra Hudson Discs

NIAGARA HUDSON POWER Corp., New York, in July will renew *Mr. & Mrs. Wise Penny* for another 13 weeks over six stations in New York State, WSYR, WFBL, WOKO, WGR, WBEN, WGY. Programs are quarter-hour WBS transcriptions broadcast once or twice weekly, schedule depending on the station. Batten, Barton, Durstine & Osborn Inc., New York, has the account.

New Haven Rail Spots

A SPOT campaign featuring lower rail fares has been started on WNAC, Boston, and WICC, Bridgeport, by New York, New Haven & Hartford Railway, using five weekly announcements for four weeks. Wendell P. Colton Co., New York, has the account.

15 POINTS YOU SHOULD KNOW ABOUT W9XBY IN KANSAS CITY

The SPORTS STATION of the MIDDLE WEST

1. Owned and operated by First National Television, Inc. Full time, 1530 kc., 1000 watts power. Has full commercial privileges—carries advertising the same as any other station.

2. NOT a short-wave station; can be tuned in by all modern radio sets and most older models. A survey of 2947 radio sets (77 makes) in 1935 showed that 91.2% could receive W9XBY.

3. The only true high fidelity station in the middle west. A double-width channel of 20 kc. (Other stations have a 10 kc. channel) guarantees true high fidelity reception with no interference from other stations. A clear, powerful voice.

4. First National Television, Inc. operates a training school for television and commercial radio engineers—practical work and research with the newest developments in radio. So W9XBY has the very best and latest technical equipment; RCA-Victor latest type I-D transmitter and high fidelity studio equipment.

5. More floor space for studios and offices than any other Kansas City station. Three entire top floors in the Power & Light Building—the tallest building in the state and midwest.

6. Gives effective daytime coverage for radius of 50 miles. Population of 905,108; radio homes totalling 195,550; annual retail sales of $236,512,000.

7. Night coverage of W9XBY greatly increased due to high frequency and double width clear channel; effective coverage for rad.us of 200 miles and valuable secondary coverage.

8. Efficient production and business staff—26 employees. All experienced radio people.

9. Outstanding reputation as sports station and carries all important sports events. An asset to advertisers; Kansas City is a sports city and these broadcasts pull largest audiences of any radio program in Kansas City. Sports announcers receiving national recognition.

10. 80% of local radios tune to our baseball broadcasts sponsored by Wheaties. Kansas City office of General Mills has largest quota in this unit (including St. Louis)—170% above 1935. And they are ahead of quota. General Mills using W9XBY exclusively to test new merchandising feature.

11. Kansas City listeners are summer night owls. W9XBY is last Kansas City station to sign off at night; sponsored programs until 1:00 A.M.

12. We have better class of metropolitan listeners—our features attract those with larger buying power. Much fan mail is dictated by professional men and executives of large firms. Large male audience.

13. These listeners acknowledge the advertisers. Most letters express appreciation to sponsor for making possible such outstanding broadcasts.

14. Our rates are too low and will soon advance. The largest audience for many features yet our rates are among the lowest. 15 minutes six times per week for as low as $59.40 per week. $39.60 daytime.

15. W9XBY offers best opportunity for spot broadcasting in this territory. Station tested programs and several choice periods open for sponsorship, both daytime and at night with exceptional coverage. Special sports features available from time to time.

- OWNERSHIP
- EQUIPMENT
- COVERAGE
- PROGRAMS
- ADVERTISING
- RATES

RADIO STATION W9XBY
KANSAS CITY, MISSOURI

Merchandising Notes

All Over the Town—How to Sell Bread—Summer Booster Bridge for Sales—Movie Merchandising

KELLOGG Co., Battle Creek (cereal), sponsoring *Kellogg Melody Time* on WBZ and WBZA, Boston and Springfield, Mass., is undertaking an extensive merchandising campaign has installed 24-foot billboards atop downtown Boston skyscrapers, and on streets in and around Metropolitan Boston; card advertisements in street car and elevated systems throughout New England; direct mail broadsides to wholesalers; and circulars announcing the program together with the distribution of samples in a house-to-house canvass in New England.

Prior to this, however, the agency, N. W. Ayer & Son Inc., New York, ran half-page advertisements with pictures of the program's artists, in all Boston newspapers. The following week ads were published in all Boston and leading New England newspapers. In addition, a merchandise tiein with grocers in strategic points was used to good sales advantage. Copy on billboards invite the public to dial in its program with this wordage: "Listen to *Melody Time* on your radio. Every Monday, Wednesday, Friday at 6:15 p. m., over WBZ. Kellogg Corn Flakes."

One billboard is in the central locale of Boston's theatrical district atop the Regal Shoe Building at the Corner of Tremont & Stuart Sts., directly facing the Bradford Hotel studios of WBZ. It is done in Kellogg colors and shows a master of ceremonies before a microphone. In a corner is a section of a corn flakes package. The program, thrice-weekly, is 15 minutes of musical variety.

* * *

WHEN Gordon Baking Co., Detroit (Silvercup bread) decided to depend on radio exclusively for promotion of bread sales, it presented itself with an annual increase in business for this line. To test the popularity of its Mutual network program, the Lone Ranger Safety Club was formed, permitting children to join by obtaining membership cards at stores selling Silvercup bread, on which they wrote the name and address of the dealer. More than 549,000 children joined the club.

* * *

ON THE *Jay Wesley* baseball review, WEEI, Boston, offers a pack of playing cards for ten labels from Kentucky Winners cigarettes. The sponsor, Penn Tobacco Co., Wilkes-Barre, Pa., has realized sales of as many as 2850 packages a day, judging by labels submitted to the station, many of them submitted by women who serve Kentucky Winners at bridge clubs and who switch their husbands to the cigarettes.

* * *

WCAE, Pittsburgh, has issued a promotion piece based on comparison of its card rates and percentages of listening audience in that market with the rates and audience of other Pittsburgh stations. Growing activity in the steel industry is presented as an argument for the growing importance of the market. Population data in the signal contour are analyzed.

TO SLAY the "summer-slump" bugaboo in Milwaukee, WTMJ has prepared an unusual presentation in the form of an inexpensive brochure in a cover of verdant green. Short, pithy paragraphs illustrated by thumbnail sketches tell why "Business Begins on 6/1 in Wisconsin", and why radio is the medium with which to get this business. Mailed to accounts and prospects in Milwaukee and Wisconsin, the folder has already more than paid for itself in new accounts and in keeping alive several important accounts which expected to drop their radio effort during the summer months.

* * *

IN A 12-week contest for string bands, WSPA, Spartanburg, S. C., announces that it received 1,336,536 votes from listeners, an average of 15,911 a day. The sponsors, H. S. McKeown Co., Spartanburg agency for General Electric Co., claims that sales directly traceable to the program amounted to more than $13,000 in the 12 weeks. The contract has been renewed for an indefinite period and the value of prizes has been increased.

* * *

TO PROMOTE *Breakfast Express*, WHIO, Dayton, is issuing a pass to those writing in—with an official signature and stamp. The pass entitles them to the privilege of getting up between the hours of 6 and 7:30 a. m., dialing WHIO, and getting complete details on the weather, the time after each recording, conditions of the weather outside—and the latest bargains in Dayton merchandise.

* * *

WOAI, San Antonio, has its merchandising staff make regular monthly visits to grocery and drug dealers as well as electrical equipment stores, department and furniture stores to check sales, help dealers in promoting advertised product, find their reactions on radio programs and what customers say about them and help them in displaying WOAI advertised articles.

* * *

GENERAL MILLS Inc., Minneapolis, is mailing copies of *American Association on Parade* to listeners who mail a sales slip for two boxes of Wheaties plus 10 cents to W9XBY, Kansas City, broadcasting American Association games for the second successive year. The 102-page book contains complete history of the league and regularly sells for 25 cents.

* * *

KLZ, Denver, reminds agencies and advertisers that it's cool in the Rockies by sending them desk atmostats which record temperature, etc. A million vacationists will spend $90,000,000 in the Colorado market in the summer months, KLZ claims.

* * *

KFWB, Hollywood, on July 1 will start publication of a weekly series of news notes and statistics for agencies. Richard Stannard, newly appointed sales promotion manager, will edit the booklet.

AFTER an article in BROADCASTING (June 15) had mentioned that L. H. Martin, advertising manager of Miller's Laundry, Des Moines, was planning as a result of his successful campaign on KSO to syndicate a transcription series of bridge lessons, Mr. Martin contacted Mr. and Mrs. Ely Culbertson, bridge experts and now is offering a complete series of transcribed bridge lessons by the Culbertsons, with printed copies of them and other merchandising features. The campaign consists of 40 quarter-hours. Bridge lessons were used successfully by Miller's Laundry in acquiring new customers.

* * *

IT'S the show place of the Southwest, WKY, Oklahoma City, explains in an eye-capturing promotion piece about its new modernistic studio layout. The six-page folder has a cover showing the building in which the station is located, the cut-out cover folding over to reveal a drawing of the studios. Other pages show photos of the studios and give comments of key radio figures.

* * *

A SERIES of 100 photographs of industries and cities in the primary area of KWKH, Shreveport, La., was prepared by the station for display at offices of John Blair & Co., national representatives, in New York, Chicago, Detroit and San Francisco. The photographs were transferred to motion picture film for display along with dubbed vocal matter descriptive of the photographs, all for the benefit of advertisers and agencies.

* * *

BILTMORE FLORISTS, Los Angeles, the week previous to Shut-Ins Day, June 14, used several Los Angeles stations to ask fans to send in names and addresses of shut-ins. On June 14 the florists delivered free bouquets to them.

SPECK BAKING Co., 50-year-old Cleveland bakers, made their first radio contract about four months ago with WGAR, and they can now be added to the list of radio boosters. They present three times weekly, *The Adventures of Pan & Tan*, child program, with membership for boys and girls in the Pan Tan Club. Less than three weeks after the club was started, they had 23,000 members and new memberships are coming in at the rate of 1200 a day. The plan is to present a picnic at Euclid Beach Park July 16 with free rides for members. Announcement of this picnic doubled daily enrollment. Speck uses wagon signs, and package inserts to round-out radio promotion. The skit consists of two juveniles, *Pan & Tan*, and their Uncle Dan, who is Wayne Mack, WGAR dramatic director and director of the program which is written by Jerome Speck, sales manager of the Speck Baking Co.

* * *

A SUMMER campaign for the dealers of Coolerator, air-conditioned ice refrigerator, is being conducted on WDRC, Hartford. The program features a transcribed dance orchestra and a story of unusual interest about ice by the *Traveling Iceman*. Continuity stresses the unusual facts about air-conditioning in refrigeration, explaining how Coolerator features a circulation of moist air to keep foods from drying out. Delivery of ice is a minor portion of the continuity, being inserted in the closing announcement. The program is sponsored by the Highland Ice Co. and the Southern New England Ice Co. of Hartford; the L. T. Wood Ice Co. of Manchester, suburban town nine miles from Hartford, and the ice dealers of New Britain, another Hartford suburb also nine miles away. Many inquiries regarding Coolerator are being received by these dealers.

MERCHANDISING DISPLAY—Here is Tom Breneman, manager of KFRC, San Francisco, and C. W. Saunders, manager of the New Mission Groceteria, looking over one of the many merchandising displays of Durkee Famous Foods Inc. (mayonnaise), tied in with the CBS-Don Lee network program "Good Morning Neighbor", which started June 2 for 26 weeks. Breneman is featured in a triple role in the twice-weekly quarter-hour program emanating from KFRC. Mayonnaise container, offered as a premium, is an eight-ounce Libbey Safedge tumbler colorfully decorated with Mickey Mouse characters. Agency is Botsford, Constantine & Gardner Inc., San Francisco.

More and More it's . . .

KOIN in Portland, Oregon . . . for Radio Advertising!

On November 1st, 1935, KOIN discontinued the broadcasting of all forms of medical advertising, (other than network), advertising dentists, etc. Notwithstanding this, total local program business since that date has shown a GAIN OF 31 PER CENT; making KOIN more than ever unchallenged first choice in all types of local business.

LOCAL PROGRAMS

The following figures are for the four-week period from Sunday, March 29, to Saturday, April 25, inclusive. x—Indicates accounts that have used KOIN for one year or more.

KOIN	Hrs.	Mins.
xBerg, Charles F.; **Women's Clothes**	3	
Blitz-Weinhard; **Beer**	2	30
xColumbian Optical Co.; **Optometrists**	3	15
Columbia Pickle Co.; **Pickles**	1	
xFahey Brockman; **Men's Clothing**	6	
Gadsby Furniture Co.; **Furniture**	3	
Gevurtz Furniture Co.; **Furniture**	3	45
xHeathman Hotel; **Hotel**	7	
xHolman, Edward, & Son; **Mortuary**	2	
xHoneyman Hardware; **Hardware**	1	
xMeier & Frank; **Department Store**	9	
xMeyer, Fred, Inc.; **Food**	6	
xNorthwestern Electric Co.; **Electric Power**	2	
xPacific Outfitting Co.; **Men's Clothing**	1	30
Pendleton Woolen Mills; **Clothing**	2	
Portland General Electric Co.; **Electric Power**	1	
Portland Federal Savings & Loan; **Financial**	1	
xPortland Public Market; **Food**	6	
Powers Furniture Company; **Furniture**	7	
Proctor's; **Women's Clothing**	3	
Shipley, W. W.; **Automobiles**		45
xWeiner's, Joe; **Men's Clothing**	6	

Competing Station	Hrs.	Mins.
Collins & Erwin; **Pianos**	3	
Doumitt Foot Comfort, Inc.; **Shoe Store**		15
Gill Bros. Seed Co.; **Seeds, etc.**	1	
Gumbert, Milton L.; **Furs**	1	40
Herner Radio; **Radios, etc.**	1	30
Jacoby, M.; **Jeweler**	2	10
Luke, Tommy; **Flowers**	2	
Meier & Frank; **Department Store**	12	30
Montag Furnace Co.; **Furnace Mfrs.**	2	
Nick's Flower Home; **Flowers**	1	
Painless Parker; **Dentist**	5	45
Semler, Dr. Harry; **Dentist**	13	
Star Furniture Co.; **Furniture**	20	30
Vancouver Fur Factory; **Fur**	1	

These figures are commercial programs only, and do not include political speeches, some of which were carried on both stations. KOIN does not accept political speeches until after 9 p.m.

TOTAL HOURS

KOIN 77.45 — **Competing Station 67.20**

NUMBER OF ADVERTISERS

KOIN 22 — **Competing Station 14**

PARTICIPATING PROGRAMS—LOCAL

KOIN carries four daily participating programs sponsored by 28 advertisers with an average of 1.7 announcements per ¼ hour. Total time, 85 hours for 4-week period. Competing station carries no programs of this type.

KOIN—85 HOURS
Competing Station
NONE

ANNOUNCEMENT ADVERTISING

Accurate competitive figures not available, but fair estimates indicate substantial advantage with KOIN. Actual KOIN figures for the 4-week period show 643 announcements, or an average of over 23 daily. In comparison with figures preceding November 1st, 1935, this constitutes a

70% GAIN

NOTE: Figures for former period used for purposes of comparison were published in October, 1935, from a check made Aug. 25th to Sept. 21st, 1935.

KOIN is the CBS key station for the Pacific Northwest . . . Its record of preference among Portland advertisers is due to its ability to deliver maximum results per dollar of advertising expenditure.

KOIN

Exclusive Representatives: *FREE and SLEININGER* New York, Chicago, Detroit, Los Angeles, San Francisco

Last-Minute Action Kills Food-Drug Bill

Measure Defeated in Congress After Three-Year Struggle

A THREE-YEAR fight for enactment of food and drugs legislation along the lines of the Copeland Bill was lost with the adjournment of Congress June 20 when the House refused to accede to a division of authority over advertising control between the Agriculture Department and the Federal Trade Commission.

A day before adjournment the House without advance notice considered and passed the Copeland Bill (S-5) and paved the way for its enactment. There were some two score amendments in the bill as it passed the House but the only one which provoked any discord was that relating to the administrative provisions. The bill, advocated by the administration, would make more stringent the laws governing the sale and advertising of foods, drugs, cosmetics.

Senate and House conferees met all day June 20 in the hope of compromising their differences. Practically all of the House changes were agreed to with the exception of that proposing retention of jurisdiction in the Trade Commission rather than its transfer to the Food & Drug Administration of the Department of Agriculture. A compromise finally was worked out whereby the Food & Drug Administration would retain control over provisions having to do with drugs and devices while practically all matters relating to foods and cosmetics would be administered by the Trade Commission.

To Be Revised in 1937

THIS, however, did not suit the House which wanted full control vested in the Trade Commission rather than "Tugwell" administration. After lengthy debate the House, by a vote of 190 to 70 rejected the Senate proposal and the bill died with the end of Congress.

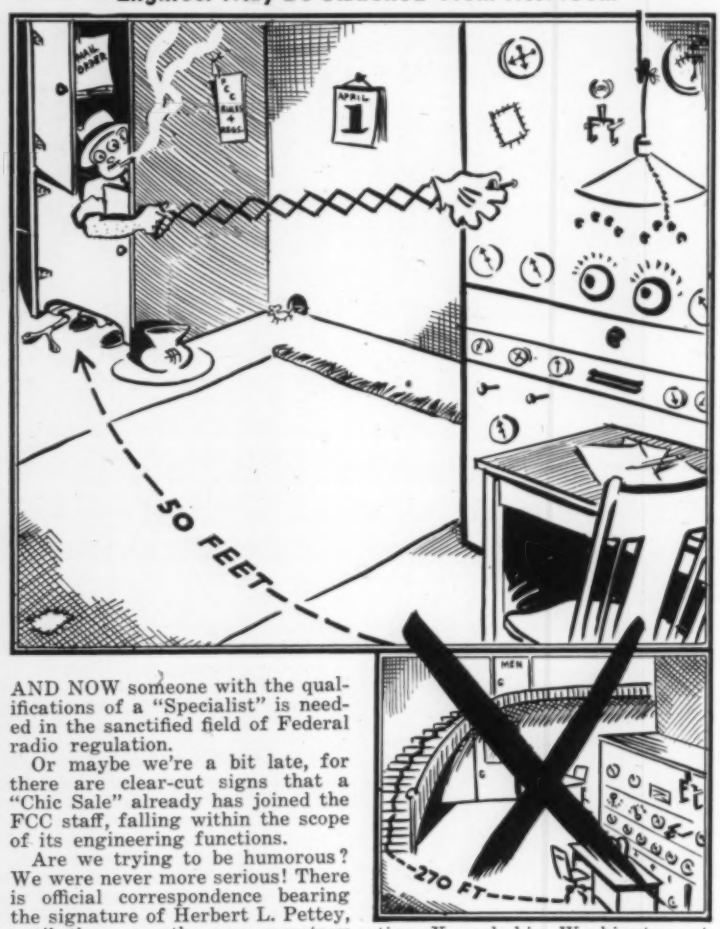
The Copeland Bill, as it passed the Senate last year, was far different than the original Tugwell Bill which would have drastically curtailed the sale and advertising of these commodity lines. The House toned down the bill even more and opposition had developed against it from some groups on the ground that it was too weak to do any good.

It is expected that renewed efforts will be made at the next session of Congress, convening in January, to have more stringent legislation enacted. The Federal Trade Commission has vigorously opposed transfer of any jurisdiction over advertising provisions to the Food & Drug Administration. But for the disagreement on the question of administration, the bill would have passed, it is believed, early in the session.

Another measure involving advertising which died with this Congress was the Wheeler-Rayburn Bill which would have given the Trade Commission authority to act without proving the element of unfair competition. Organizations representing newspapers and manufacturers opposed this bill on the ground that it would result in more government snooping into business.

NATURE FORGETS, BUT NOT FCC

Pompous Documents Settle Question of How Far an Engineer May Be Stationed From Rest-room



AND NOW someone with the qualifications of a "Specialist" is needed in the sanctified field of Federal radio regulation.

Or maybe we're a bit late, for there are clear-cut signs that a "Chic Sale" already has joined the FCC staff, falling within the scope of its engineering functions.

Are we trying to be humorous? We were never more serious! There is official correspondence bearing the signature of Herbert L. Pettey, until three months ago secretary of the FCC, to back up our point. And remember! Mr. Pettey's signature as secretary of the FCC was the counterpart of that of the Lord Privy Seal of the British Empire.

"The Commission," wrote Mr. Pettey one hot day last July to a station which in this accounting will be identified as Station X, "has received a report from the inspector in charge * * * relative to operating conditions existing at the transmitter of Station X * * * with regard to the convenience available to the operator on watch for personal necessities. It appears that the transmitting equipment must be, and probably is, left unattended at times."

The letter continued that if such is the case it violates Rule 170 of the Commission which requires that each station keep at least one operator on duty during all periods of actual operation of the transmitter at the place where the transmitting equipment is located. Getting deeper into this intricate problem, the FCC Secretary wrote that the word "place" in this rule has been construed to mean the room in which the transmitter is located and where the operator in charge may observe the readings of the various indicating instruments. A full statement of explanation was demanded.

Then followed a hot and heavy exchange of correspondence between the chief engineer of Station X and his Washington attorney, which lasted from July until September, and finally culminated in a letter to Mr. Pettey promising to rectify the situation. Choice paragraphs, omitting the unpublishable ones, tell their own story.

First, wrote the chief engineer to his Washington Blackstone:

"It is true that the equipment at * * * is actually left unattended at times, when the transmitter is on the air, due to the fact that it is necessary for the operator to answer the call of Nature. The problem has never occurred to us before, as we had interpreted the word 'place' to mean the building in which the transmitter was located and not the actual operating room.

"It seems a little incongruous to imagine an operator sitting on the (*censored*) with the control readily at hand and the meters in full view, but we like to think we employ habitually (*censored*) operators. It hardly seems fair that a station, operating on a small scale, should be required to employ an operator to stand by to relieve the operator normally on duty while he relieves himself.

"The only other alternative would be to install facilities in the actual operating room. This would, no doubt, prove embarrassing to the operator as well as visitors, who might happen in at odd moments."

Responded the barrister, in typical legalistic style:

"It seems to me that the problem raised is one that will require the combined efforts of an engineer, a lawyer and a 'specialist' to solve. Of course, the operators might be trained to so regulate their routine that they could go through their shifts without leaving the instrument panel, but that might result in 'cruel and unusual punishment' which is, I understand, unconstitutional."

Corridor Mileage

IN A LESS serious vein, he asked for information as to the location of the (*censored*), to determine if the operators actually roll up much mileage in their trips back and forth. Then, mumbled on the lawyer: "The practice of law sometimes leads one into amazing activities."

Came the disheartening news from the chief engineer of Station X that the nearest (*censored*) was located on the second floor of the hotel in which the transmitter is located, a distance of some 270-odd feet from the transmitter. Immediate steps, he said, were being taken to correct this and install the proper facilities closer to the transmitter (about 50 feet away).

It then became the duty of the attorney so to inform the FCC Privy Seal. In stout-hearted manner, and with a flourish of his facile pen, he wrote, in part:

"The Commission is hereby advised that the (*censored*) facilities formerly available for the use of the operator on duty were somewhat removed from the room in which the transmitter of the station is located. In view of these facts it is possible that a literal interpretation of the Commission's Rule 170 might indicate a technical but unintentional violation of that requirement. However, extreme caution always has been exercised by the station management in connection with this matter, and arrangements are now being made to adjust the situation by obtaining facilities closer to the operator's post of duty."

Thus the FCC emerged victorious in another momentous battle involving compliance with its technical regulations. No appeal is indicated.

Big Tonic Campaign

INDO-VIN Inc., Cincinnati (tonic) has all plans made to go on the air, coast-to-coast, with a disc campaign. Transcriptions have been ordered from the Chicago branch of the Columbia Phonograph Co. and will be made from scripts being written by Sandra Michael, of Chicago. The program, which is to be called *Welcome, Neighbor* will be on the air 15 minutes five days a week, beginning early in the fall. Cramer-Krasselt Co., Milwaukee, is the agency. Actual making of the transcriptions will begin within the next ten days, and the distribution will include points in 35 or 40 states. Although this is not the first appearance of the Indo-Vin concern on the air, it is by far their most important and comprehensive one. Indo-Vin has tried radio advertising, sporadically, at several times in recent years. Its latest previous appearance was during 1934, when it offered a male singer on a spot program.

ADVERTISERS PIN BOUQUETS ON

WTCN

FOR ITS PRODUCTIVENESS

. . . . . and after all,
RESULTS are what count

HERE'S WHAT WTCN ADVERTISERS SAY:

The following are excerpts from letters of WTCN advertisers. They express a satisfaction with results that is typical of the attitude of all WTCN users.

"The results were so gratifying that we signed a year's contract."
SNYDER'S FAMILY LIQUOR STORE.

"Since our Monday program, we have received 122 dollar bills and sales slips."
NI-TONE COMPANY.

"Our clients have expressed their complete satisfaction not only with your facilities, but with results obtained through the use of your medium."
HAROLD S. CHAMBERLIN ADVERTISING AGENCY.

"Our returns from WTCN have been so satisfactory that we have not only doubled the length of our contract, but have also doubled our time on the air."
CENTRAL FURNITURE & CARPET COMPANY.

"The response to our offer was so extraordinary that we believe the above information would be of genuine interest to your listeners."
BLACKETT-SAMPLE-HUMMERT, Inc.

"We have been advertising over your station for a year now and from the beginning have had success."
FOREMAN and CLARK.

FACTS ABOUT WTCN

Owned and operated by the St. Paul Dispatch-Pioneer Press and Minneapolis Tribune.
Located in the Twin Cities . . . nation's 10th largest market . . . population 750,000.
Operates on a new 5,000 Watts transmitter.
Population of Primary Area . . . 1,856,954.
Families in Primary Area . . . 448,089.
Families with radio in Primary Area . . . 223,865.
Potential audience in Primary Area . . . 891,460.
More local advertisers use WTCN than any other Twin Cities station.
79% of WTCN contracts are renewals.
Broadcasts all important local sport events, such as baseball, football, basketball and hockey games, boxing, wrestling, golf tournaments, etc.
Has the most elaborate news broadcasting service in the Northwest through the combined news-gathering resources of the Minneapolis Tribune, St. Paul Dispatch-Pioneer Press and St. Paul Daily News.
Broadcasts all civic activities and local enterprises of public interest, such as traffic court, council meetings, community singing, dedications.

IN THE TWIN CITIES MARKET IT'S WTCN

Minneapolis Tribune and St. Paul Dispatch-Pioneer Press Station

Wesley Temple Bldg., Minneapolis — Minnesota Bldg., St. Paul

FREE & SLEININGER, NATIONAL REPRESENTATIVES

FLASH FLASH

NBC Advertisers

Your West Coast Programs

Whether On

Red or Blue Network

Can Be Scheduled

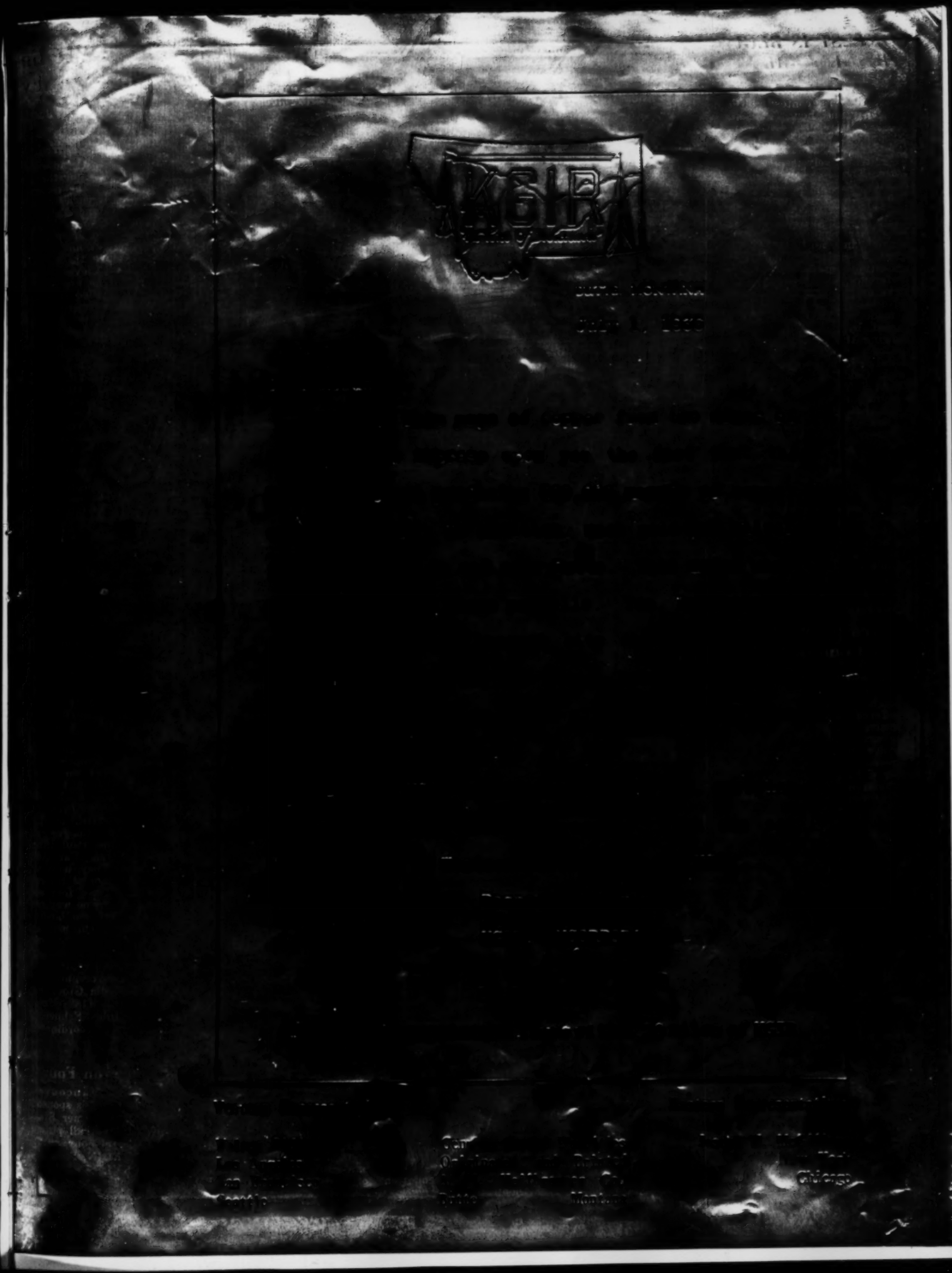
On

KGIR

BUTTE, MONTANA

Without Adding Another Station

★



XUM

Welcome to Chicago, N. A. B.! Come up and see us.

TWO STRINGS TO YOUR BOW

And either one an effective projector for your sales arrows. In America's second market direct your advertising through the facilities of either WMAQ or WENR and earn extra dividends in results.

WMAQ
50,000 WATTS
NBC Red Network

WENR
50,000 WATTS
NBC Blue Network

CHICAGO

Completely programmed by NBC

Prof. Armstrong's System--What It Means

Frequency Modulation Plan Furnishes Plenty of Food For Thought on Future of the Broadcast Industry

By PAUL F. GODLEY

HERE is an expert's digest of the technical aspects of the new ultra-shortwave system of frequency modulation developed by the noted Maj. Armstrong, who has been demonstrating it to engineers during the last few months and who detailed it further at the June 15 FCC shortwave hearings. Maj. Armstrong's system envisages practically perfect broadcast reception if and when the ultra-shorts eventually become used for program services on an everyday basis, and he is convinced faithful audiences will inevitably tune in those waves.

MAJ. E. H. ARMSTRONG, inventor of feedback, superregenerative and superheterodyne circuits, and now Professor of Electrical Engineering, Columbia University, has invented a radically new system of broadcasting, which is technically described in the May *Proceedings of the Institute of Radio Engineers*. He places programs on a carrier in a manner which produces a fluctuation in the radiated field unlike any field fluctuation produced by nature. He provides a receiver which is preponderantly insensitive to the natural (or man-made) noise fields.

Noises result from a variation in the amplitude of a radiated wave. Present methods put programs on their carrier waves by variation of amplitude. Present radio receivers are sensitive to any and all amplitude phenomenon. They cannot differentiate between amplitude variations which are noise, and those which are program.

Prof. Armstrong modulates his carrier by shifting its frequency—"frequency modulation". Heretofore, such has been condemned. But, heretofore, no one has gone about the thing in the Armstrong manner. In the receiver, immunity from the amplitude phenomenon is provided. Thereafter, the effects of the frequency modulation of the carrier are translated into amplitude phenomenon for the operation of the usual type of amplifier and reproducer.

Service Areas

PROF. ARMSTRONG has been working on this system for 12 years. He has secured patent coverage here and abroad and some of the patents have issued. The new system has been experimentally applied to the ultra-high frequencies using a power of two kilowatts (peak) and he has been granted a permit to build a 40,000 watt station in or near New York City. His interest centers about the production of broader and dependable service areas, true high fidelity of reproduction and the elimination of static and noise. He advocates the use of channels having a width at 7 meters of 200 kilocycles, and it is his expressed belief that with a power of 50,000 watts it will be possible to provide (1) a dependable service area superior to that possible with 500,000 watts as now applied, and (2) a channel efficiency (number of stations per channel, and number of services per station) in excess of anything previously contemplated.

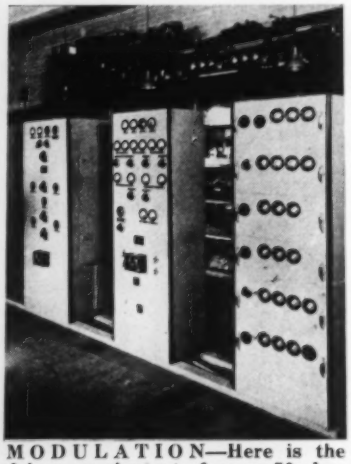
What is there to this new system? Can it provide a greatly broadened listener service? Can it effect a major extension of the broadcasting industry? Can it serve as the foundation of a truly universal, and truly dependable broadcasting service? Is it a good "buy"? If the answer to these questions is "Yes", as Prof. Armstrong believes, the broadcasting industry and the radio industry in general has a great deal to think about.

A complete and easy development of the industry along present lines is barred by numerous technical handicaps. Chiefly, these are static, sky-waves, and scarcity of facilities. Many of our people have either a very poor and intermittent service, or none at all. Uninterrupted service is known to few indeed. Summer static and thunderstorms have seen to that.

For an *ideal* broadcasting system the specifications might read something like this:

(1) A static-free service.
(2) A noise-free service.
(3) A service free from the effects of sky-wave, such as volume fading, side-band fading, heterodynes, and cross-talk.
(4) A service which is uniform day and night, and throughout all seasons.
(5) A greatly broadened, dependable service area for a given power.
(6) A decidedly greater fidelity of reproduction—*realism*.
(7) A system which could supply two or more services from a single transmitter and its associated channel.
(8) Equipment costs for both transmitter and receivers of the same order as at present.

In the face of the numerous striking demonstrations of the performance of the Armstrong system the above specifications cannot be lightly dismissed. During a severe thunderstorm reception from a 2 kw. (peak-power; UHF) Armstrong modulated transmitter 85 miles away proved to be static and noise free while the identical program from a 50,000 watt station at the same distance (WEAF, 200,000 watts peak power) was rendered wholly and entirely unacceptable by the static. Comparison has also been made between amplitude and frequency modulation using UHF (120 mc.) at low powers (250 w. peak) over shorter distances (12 miles). The comparison here shows program rendered useless due to ignition noises and man-made static as against a thoroughly "clean" program of a fidelity many times superior to any which our present broadcasting can offer. Striking, too, is the comparison as shown by the cathode-ray oscilloscope. The unmodulated carrier for the conventional method is seen as a broad, noise-filled envelope; for the Armstrong method, as a smooth, narrow line.



MODULATION—Here is the driver equipment for a 50 kw. frequency modulation transmitter as devised by Prof. Armstrong.

What of the Future?

IN THE UHF's—above some 36 mc.—sky waves do not have to be dealt with. Side-band fading and serious amplitude fading are absent. Shrinkage of coverage due to these is gone! And, with the Armstrong system, shrinkage of coverage due to static and ignition noise certainly appears to be gone. With the 2,000 watt transmitter referred to a coverage radius of 85 miles was had. What might this radius be with powers of the order of 50,000 watts? Armstrong, apparently, intends to find out. It is his belief, as indicated, that the dependable service area of such a station will exceed that of a 500,000 watt station of the conventional variety on present channels. If this proves to be true the economics involved alone may well serve to affect fundamental changes in the broadcast set-up of the future.

One of the most surprising products of the system resides in the fact that where stations operate on the same channel the signal of the undesired station must be half as strong as that of the desired before interference sets in. Even under this relatively favorable circumstance there need be no extensive cross-talk area in the practical sense. Antennas for the reception of the UHFs are small in dimensions, and directive antennas for differentiation between two or more stations operating on the same channel and in different directions are both cheap and easy of construction and installation. Thus, the restriction on duplication of facilities on the same channel is, relatively, mild in the extreme, and the efficiency of the channel in terms of dependable service becomes relatively very great.

Accustomed as we are to thinking in terms of 10 kc. channels, the requirement of a 200 kc. channel for the Armstrong system appears as an extravagance — as a serious offset to the advantages of the system. Because it is the best that we have had—all that we have had—we are accustomed to thinking of our present system as a dependable service to the country as a whole. *But it is not a universal service*, and for the great majority of those who are served, not a *dependable* service! Studied in terms of universality and dependability, and in terms of *cost* of universality and dependability were current methods used (assuming that to be possible), our present system appears in a highly unfavorable light.

Allocation Aspects

CONCERNING the Armstrong system, the evidence is incomplete. Yet, let us examine the possibilities, conjecturally, in an effort to arrive at some basis of comparison—and let us not be too much surprised if the figures arrived at become almost astronomical, relatively. Let us assume that a 50,000 watt station in the vicinity of 40 mc. (7.5 m.) can be made to show an all-time dependable service radius of 100 miles. Further—and bearing in mind directive receiving antennas, and the fact that the undesired signal must be half as strong as the desired to produce objectionable cross-talk—let us assume that transmitters of like power may be assigned at distances of 200 miles up and down the land. With tolerances this gives a good 50 stations per channel.

Finally, let us utilize for this hypothetical set-up that portion of the spectrum between 7 and 8 meters alone. Again with tolerances, here are a good 20 channels, and the total number of 50,000 watt stations has reached 1000; each with a potential all-time service area of about 30,000 square miles, for a total of 30 million square miles. *The total land area of the entire continental United States is 3 million square miles.* This would mean ten services always available to every listener everywhere. Place two simultaneous services on each carrier and the number is of course doubled.

So much for conjecture. But, if we are to be guided by Armstrong's demonstrations, possibilities such as these by no means appear ridiculous.

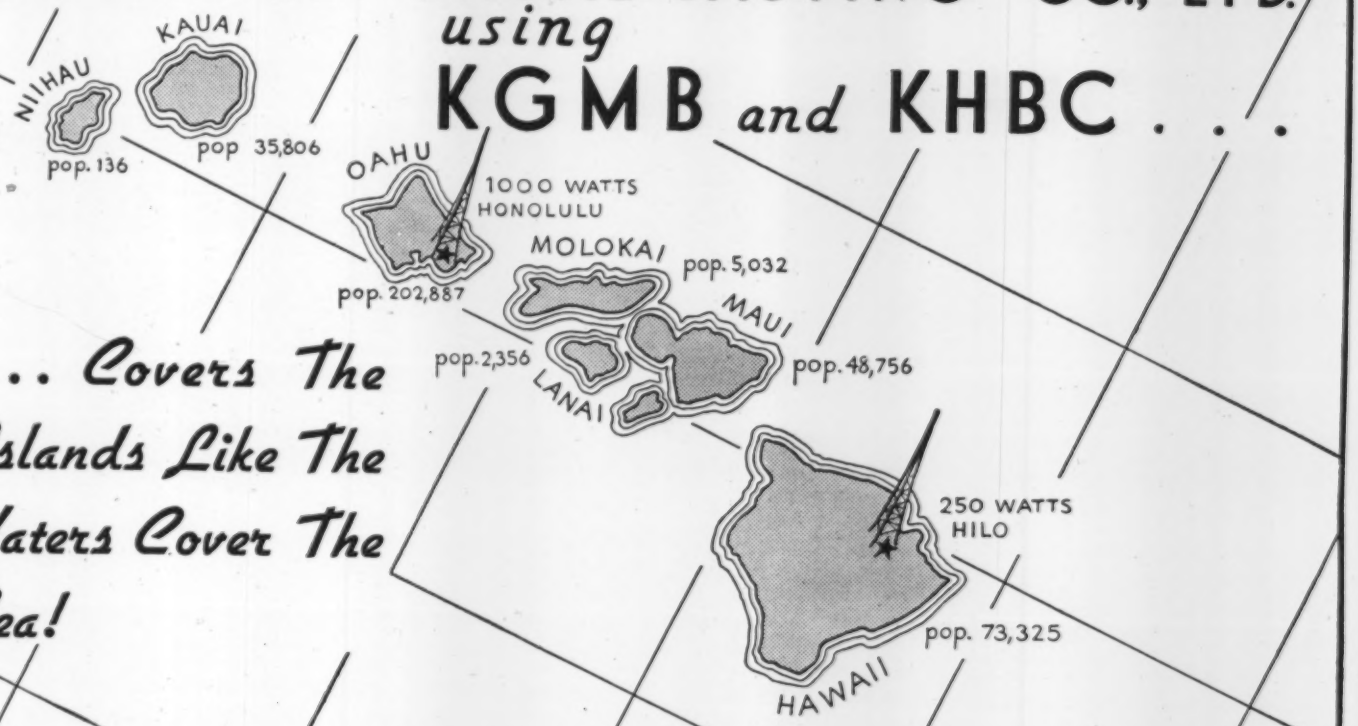
Limitations imposed by the present system place prime fidelity, too, beyond reach. Perspective broadcasting with its astonishing realism has been unable to get out of the laboratories. Frequently modulation is a way out. Or, it is a means which can provide transmission of two sound programs and a facsimile service from a single transmitter, on a single carrier, for consumption by a single combination receiver.

What manner of transmitters

(*Continued on page 84*)

HONOLULU BROADCASTING CO., LTD.

using KGMB and KHBC . . .



.... Covers The Islands Like The Waters Cover The Sea!

HAWAII ONE OF AMERICA'S BEST MART OUTLETS

Value of Merchandise Shipped From Mainland Increased More Than $15,000,000 During '35

By R. W. JIMERSON
Financial Editor, The Examiner

Figures obtained yesterday through the Federal Department of Commerce affirm the position of the Territory of Hawaii as one of the best markets for the products of continental United States.

Value of merchandise shipped from the mainland to Hawaii increased by more than $15,000,000 during 1935, reaching a total of $78,924,776.

Reprint from San Francisco Examiner
March 7th, 1936

ARE YOU GETTING YOUR SHARE?

IT IS POSSIBLE
with one program over
KGMB—Honolulu
and
KHBC—Hilo

to put your advertising message into the homes of more than 70% of the purchasers of the foregoing merchandise.

HONOLULU BROADCASTING CO., LTD. ☆

FRED J. HART, President and General Manager

SAN FRANCISCO OFFICE, CALIFORNIAN HOTEL

Representatives

CONQUEST ALLIANCE COMPANY

NEW YORK, 515 MADISON AVE. · CHICAGO, 228 N. LaSALLE ST.
LOS ANGELES · · · MacGREGOR & SOLLIE
729 S. Western Ave., Hollywood, Calif.

KGMB
HONOLULU, OAHU

KHBC
HILO, HAWAII

THIS HAWAIIAN BROADCASTING SYSTEM ADVERTISING DOES NOT COST.. *IT PAYS!*

Industrial Market Effectively Reached By Equipment Firm

Duff-Norton Finds Disc Series Gives Successful Promotion

DUFF-NORTON MFG. Co., Pittsburgh (The House That Jacks Built), oldest manufacturer of industrial jacks, and selling to a purely industrial clientele, has found its brief experience in radio advertising successful and is continuing its transcriptions on KDKA, Pittsburgh, as well as expanding to other stations. The series has been an innovation in industrial sales promotion, with its use of a disc program three evenings a week.

To promote its program, Duff-Norton has circulated to the industrial trade an eight-page illustrated folder in colors, inviting comment on its idea. The company deals principally with railroads, oil fields and heavy industries.

NBC Trade News Service has just issued a release covering the broadside as well as the NBC transcription series which the sponsor is now using. The sponsor makes this radio approach:

A Special Market

"AS THE world's oldest and largest manufacturers of lifting jacks we have to our credit 55 years' experience serving the railroads, oil fields, mines and American industry. In addition we have the plant, the modern equipment, the experienced man power to start where you leave off . . . in the producing - machining and assembling of special or standard apparatus and equipment. We stand ready — on call — to go to work for you as part of your organization . . . to do your work quickly . . . accurately . . . economically."

That is the theme, verbally addressed to "Mr. Manufacturer", woven into the commercials. Actually, the radio campaign is said to have the unique advantage, not only of delivering a message to the executive, but of reaching beyond him to the unnumbered workers who in the ordinary course of events live close to the functional problems of industry, but far from selling talk.

"To these more or less forgotten men—whether they work with bridges, airplanes, locomotives, in America's oil wells or mines—the name of Duff-Norton now comes more and more frequently to mind when a job gets jammed up or something come along at the plant which can't be handled without outside help," says NBC. "This plan of extra coverage, of direct salesmanship to everyone concerned, is one that the heavy industries are turning to in increasing numbers since Duff - Norton started their campaign in June."

The agency is Walker & Downing, Pittsburgh.

JAMES R. RHODES, of Newton, Ia., publisher of four Iowa dailies, has purchased a 15 - minute Saturday evening period over WHO, Des Moines, for the *Rhodes Iowa News Digest* which introduces the newspaper's executives and editors and deals with state affairs.

Two of the New Studios in Elaborate WNOX Building.

WNOX, Knoxville, recently acquired by Continental Radio Co., Scripps-Howard newspaper affiliate, tried out operating on a 24-hour basis following formal dedication of new studios in its own building at 110 S. Gay St., main Knoxville thoroughfare. Among novel features of the layout are two paneled show - window studios on the first floor, one of which is illustrated above.

Another effective idea, conceived by James C. Hanrahan, Continental vice president, is a church-pew type of auditorium studio which eliminates noise of moving chairs and seats an extra hundred persons in the same space. This studio, decorated in aluminum and bright red and blue, seats 800.

With opening of the new studios May 27, R. B. Westergaard was promoted from commercial manager to manager. He was formerly of KSO-KRNT-WMT, Iowa, where he was merchandising manager. John Mayo, formerly of NBC and CBS, is program director and is assisted by Jack Howard, son of Roy W. Howard, Scripps - Howard board chairman.

Salesmen are Bob Anderson, Willard Blanc, Jack Mims, formerly of Southwest Broadcasting System and WGST, Atlanta, and Darvin Mueller. Announcers are Ray Atkins; Lowell Blancard, formerly of WXYZ, Detroit, and KYW, Chicago, who also is master of ceremonies; William Johnson, Charles McMahon and H. P. Shelton. Joe B. Epperson, formerly of WIS, Columbia, S. C., is chief engineer. Assistants are John Cole, P. J. Leonard, J. G. Schaefer. Others on the staff are James Hart, pianist and organist; Sally Belt, bookkeeper; John Brakebill, secretary; R. L. Hopkins, program department assistant; Charles J. Jones, building superintendent; John Towner, secretary to Mr. Westergaard.

The spectacular opening of the new studios, directed by Mr. Hanrahan, brought such crowds to the WNOX building that police were called to save the sidewalk studios and keep gate-crashers out of the big auditorium.

Coast Cookie Series

DAD'S COOKIE Co., Los Angeles, in June placed its account over the Southern California network, Los Angeles, with KFWB as the key station. The contract was for 52 weeks and handled direct. The sponsors are using three evening quarter-hours a week, plus an additional half-hour Saturdays with a juvenile revue. The half-hour program is presented from Warner Bros. sound stage with audience admitted upon presenting five coupons from packages of Dad's cookies or cookie jars.

50 kw. Is Sought By CKLW, Windsor

Newspaper Seeks to Purchase CRCW, Commission Station

CANADA'S two broadcasting stations at Windsor, Ont., just across the river from Detroit, may undergo drastic changes soon if movements now under way materialize. The changes, however, manifestly rest upon what is done about the Canadian Radio Commission, whose demise in favor of a one-man regulator is planned before the end of this year.

While not officially announced, it has been learned on reliable authority that Ted Rogers, head of the Rogers-Majestic Corp., Toronto radio firm which also operates CFRB in that city, has asked for authority to increase the power of CKLW, Windsor, from 5,000 to 50,000 kc. Under pressure from Canadian interests, the Americans formerly operating CKLW—including George Storer and Sam Pickard—recently sold the station to the Rogers-Majestic group.

Would Purchase CRCW

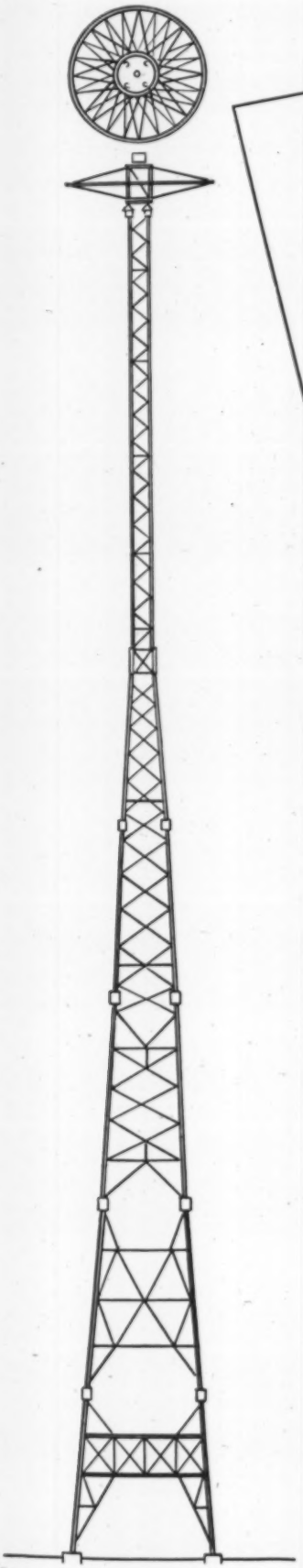
IN ADDITION, it was learned that W. F. Herman, publisher of the *Border Cities Star*, Windsor daily newspaper, is seeking to purchase the 1,000-watt CRCW, Windsor, from the Canadian Commission, its present operator. The station is on the choice 600 kc. frequency.

Another pending deal for a station purchase in Canada is reported from Stratford, Ont., where Roy H. Thompson, owner of CJKL, CFCH and CKGB in northern Ontario, is negotiating to take over CJCS, Stratford. In addition, it is reported that Mr. Rogers is contemplating buying CKCO, Ottawa, and to increase its power.

In the meantime, Canadian circles are still buzzing over the prospective appointee to the directorship for all Canadian broadcasting, proposed to parallel the functions in the British Broadcasting Corp. of Sir John Reith, director general. While the names of Gladstone Murray, Canadian-born executive of the BBC, and Reginald Brophy, Canadian - born station relations manager of NBC, are most frequently mentioned, there has also been talk of trying to recruit either M. H. Aylesworth, former NBC president, or James Wallington, popular NBC announcer, for the job—though informed circles are inclined to discount this as mere rumor. Mr. Wallington is Canadian-born but Mr. Aylesworth was born in Cedar Rapids, Ia.

American Oil on 33

AMERICAN OIL Co., Baltimore (Amoco, etc.) through its agency, Joseph Katz Co., is broadcasting six weekly RCA transcription announcements for an indefinite period on 33 stations East of Cleveland. Stations selected for the campaign were WJAX, WIOD, WFLA, WSB, WTOC, WTIC, WCSH, WEEI, WTAG, WOKO, WBEN, WHAM, WSYR, WJAR, WMAL, WTBO, WBAL, WCAO, WFBR, WFMD, WWNC, WBT, WPTF, WGAR, WHP, WCAU, WCAE, WIS, WCHV, WLVA, WTAR, WRVA, WDBJ.



● Field tests verify the calculations of WHK engineers that with its new antenna, WHK will be received in its normal area with a strength approximately equivalent to doubling the present power at the transmitter. We believe it to be the only antenna of its type in the world.

Again WHK LEADS *the* WORLD • •

with a New-Type Super-Efficient Antenna

In 1934 the engineering department of WHK under the direction of Edward L. Gove, technical supervisor, set out to develop a better, more efficient antenna system. After more than two years of study and rigorous testing WHK is starting construction of a new 300 foot, vertical "loaded" tower with a "cap" 30 feet in diameter. To the casual observer the new WHK antenna will mean merely a slender column with a huge "bicycle wheel" on top, but to national advertisers it is just so much more assurance that programs over WHK will find their way into more homes than ever before.

This is not the first time WHK has pioneered new radiating equipment. In 1930 WHK erected the first sectionally insulated towers. This step resulted in changes in antenna practice in the entire field of broadcasting.

WHK amply covers one of the country's richest markets .... over 40% of Ohio's retail sales are made within its primary listening area. Wire or write for complete proof that WHK will do more for you per dollar expended.

WHK
CLEVELAND

H. K. CARPENTER, *Vice Pres. & Gen'l Mgr.*

C. A. McLAUGHLIN, *Sales Manager*

Exclusive Representatives: FREE & SLEININGER, Inc.
NEW YORK • CHICAGO • DETROIT • SAN FRANCISCO • LOS ANGELES

Basic Station Columbia Broadcasting System

Transfer of WEEI To CBS Approved

Shifting of Network Outlets In Boston Expected Soon

SHIFTING of NBC and CBS outlets in Boston in advance of next Jan. 1 is expected following approval by the FCC Broadcast Division June 20 of the assignment of the license of WEEI, Boston, from the Edison Electric Illuminating Co. to WEEI Broadcasting Corp., a CBS subsidiary, under a lease arrangement amounting to $219,000 annually.

WNAC, Boston, present CBS outlet, is contracted for that network's service until the end of the year, but already has made arrangements with NBC to become its basic Red Network outlet when the shift takes place. The WEEI contract with NBC runs until next April, but the principals have agreed that the shifts will take place earlier if worked out to the mutual satisfaction of the parties involved.

Switching of Outlets

AS BROADCASTING went to press, conversations were in progress to set a definite date for the switching of the network outlets. Simultaneously, it is expected, WICC, Bridgeport and WEAN, Providence, owned by Shepard Broadcasting Co., will join the NBC-Blue network as part of the arrangement. It is expected that the shift will take place soon.

CBS also is expected to announce the appointment of a new manager of WEEI within the next week. The new executive probably will be designated from New York or Chicago, with the Boston staff to be augmented with other personnel.

Also pending before the FCC Broadcast Division is the application for transfer of license of KNX, Los Angeles to CBS. A hearing on the KNX transfer, at a sales price of about $1,300,000, was held June 29 before the FCC Broadcast Division. No decision is expected any time soon, and may not come until the fall.

CBS also has entered into an arrangement with KSFO, San Francisco, for lease of the station, subject to FCC approval. The lease, to cover a five-year period, with two option renewals of five years each, entails a cost to CBS of between $25,000 and $30,000 annually. Should the FCC approval be not forthcoming by the time CBS severs its affiliation with KFRC, San Francisco at the end of the year, then a regular affiliated station arrangement will be entered into with KSFO.

The WEEI lease arrangement covers a period ending April 1, 1943, at the figure of $219,000 per year, plus an additional expenditure for lease of studios and offices. The WEEI agreement also contains an option by which CBS has the right to purchase the station upon the same terms and conditions which are offered to the Edison Company by any other party and which it may be willing to accept.

EMIL POLAK, NBC musical director on the West Coast, died in a San Francisco hospital the weekend of June 21, of natural causes.

HUNDRED JUDGES—Yankee Network's "Committee of One Hundred" listening to a preaudition on which they vote their opinion.

PREAUDITIONING FOR YANKEE

Committee of One Hundred Listens to Programs and Votes Opinion of Entertainment Value

TO DETERMINE listener interest of its programs before they are introduced on the air, by means of preauditions, 100 women, a cross section of the thousands of New England women who tune in to Yankee Network features, met in the studios of the network in Boston in June to organize The Yankee Network's "Committee of One Hundred" on a permanent basis, and to determine in their first preaudition, the best of several programs that were submitted to them, for the benefit of a well-known national advertiser.

In answer to the requests of Linus Travers, Yankee Network executive, members of the committee volunteered their services as a "jury" in selecting programs, that they, as New England housewives, feel sure will appeal to the thousands whom they are representing.

In the future Yankee Network programs will carry the approval of the "Committee" and the assurance that as far as may be determined beforehand, the program will be a success on the air, and measure up to the standards of fine radio entertainment. The enthusiasm of the members of the committee, as shown by their early arrival at the studios, and by their marking of preaudition ballots, reveal the real interest and the eagerness with which the public grasps the opportunity to exercise a control in the choice of radio programs. Representatives of the advertiser, for whose benefit this first preaudition was held, were pleased with the results and have signified their intention of submitting other of their programs for approval.

Proceedings of the organization of the committee, its purposes, and first hand interviews of various members were broadcast over WAAB, Boston. It is also the purpose of Mr. Travers to conduct tours of inspection of the Yankee Network studios, introduction of committee members to radio artists and personnel of the two stations in order to familiarize them with the various aspects of broadcasting. Preauditions will be held at regular intervals and committee members will be furnished with engraved membership certificates.

Procter & Gamble Plans Spot Campaign for Dreft

PROCTOR & GAMBLE Co., Cincinnati, one of the largest of all radio advertisers, is planning to launch a new campaign starting July 6, called Dreft. It will be a transcription offering and scripts are being prepared under the title *Kitty Keen Inc.* The story will be of the dramatic type and will be heard in daytime 15-minute episodes, five a week, probably for 13 weeks, although the series may be continued for a much longer time than that. Blackett-Sample-Hummert Inc., Chicago is the agency.

The programs are already being tested over WOC, Davenport, Ia., 1:30 to 1:45 p. m. CST, but will go to a long list of spots throughout the Midwest on and after July 6. The sponsor is not yet ready to announce the list of stations.

KCMO Gets Full Time

KCMO, Kansas City, formerly KWKC, was granted a change in operation from specified hours to full time by the FCC Broadcast Division on June 20.

Greif Suit Discs

L. GREIF & BRO. Inc., Baltimore (manufacturing tailor) is offering local dealers a series of 12 five-minute transcriptions featuring Stoopnagle & Budd in a program titled *Heroes in Homespun*, cut by Langlois & Wentworth Inc., New York. The company, which has semi-national distribution of suits made from Chatham Mfg. Co. homespun fabric, has not used radio before. The discs allow 30 seconds for local announcements. Cahn, Miller & Nyburg Inc., Baltimore, arranged the series.

NBC Copyright List

AN ALPHABETICAL list of NBC *Thesaurus* selections, with information as to the copyright owner, publisher and artist, has been sent to all stations subscribing to the service, according to an announcement June 20 by C. L. Egner, manager, NBC Transcription Service.

BENRUS MFG. Co., New York (watches) on June 21 began a new series of 50-word time announcements five times nightly, seven days a week, on WJZ, New York. Announcements will run for 52 weeks. Brown & Tarcher Inc., New York, placed the account.

President Speaks Over KBIX Remote

THE UNIQUE distinction of an exclusive broadcast by President Roosevelt is claimed by KBIX, new local station in Muskogee, Okla., which put on an impromptu program last month when the Chief Executive's special train stopped at the Oklahoma City en route to Dallas, Tex.

Having been advised that the President's train would pass through Muskogee at a given time, W. L. Waltman, manager of the station, had three remote control pick-ups spaced to make sure the microphones would be easily accessible to the President's car. Although M. H. McIntyre, secretary to the president, had informed newspapers that the President would not make a talk, Mr. Waltman contacted Mr. McIntyre when the train stopped and the President consented to address the KBIX audience from the platform, while the train changed crews.

KBIX, owned and operated by the Muskogee *Daily Phoenix & Times Democrat*, took the air May 1 on 1500 kc., with 100 watts unlimited time. Western Electric equipment and a 179-foot Blaw-Knox vertical radiator have been installed. In addition to Mr. Walter, the executive staff includes G. W. Brock, chief engineer, and La Vell Waltman, program director and chief announcer. Engineers on the staff are James Manship and Dub Everly, and announcers include K. O. Richardson and Jay Crum. Kellie Morgan is commercial manager, Gordon Berger, director of musical features and Franklin Whitehead in charge of continuity.

Duffy Copyright Measure Dies as Congress Ends; New Effort Will Be Made

THE VICTIM of a successful ASCAP lobbying campaign, the Duffy Bill to amend the copyright laws died with the adjournment of Congress on June 20. It must start from scratch at the next session, which convenes in January, when it is likely that many new faces will be on the House Patents Committee, the majority of which had been cajoled into the position of opposing the measure because ASCAP opposed it.

As passed by the Senate the measure would have eliminated the $250 statutory minimum damage clause of existing law and thereby would have shorn such organizations as ASCAP and other licensing groups of the arbitrary powers they have held in forcing payments of exorbitant license fees for their works. In several other ways the onslaughts of copyright groups would have been curbed under the Duffy Bill.

Notice already has been served by proponents of the Duffy measure that they will be prepared to force action at the next session. The existing law has been on the books for a quarter of a century and is antiquated and outmoded. The NAB, along with hotels, motion picture exhibitors and other representatives of music users supported the Duffy Bill but were not sufficiently strong to offset the ASCAP lobby.

Four Stations File For 500 kw. Power

WJR, KFI, WSM, KDKA Added To Five Previously Submitted

FOUR additional applications for authority to use superpower of 500,000 watts, bringing the total pending applications to nine, were filed with the FCC during the last week in June. The applicants are WJR, Detroit; KFI, Los Angeles, WSM, Nashville, and KDKA, Pittsburgh.

Already pending are the applications of WHAS, Louisville; WHO, Des Moines; WJZ, New York, and WGN, Chicago. A general hearing on superpower has been scheduled by the Broadcast Division for September 24 and it is expected that all of the applications will be heard at that time.

In addition to the petitions already filed, it is understood WOAI, San Antonio, and WBBM, Chicago, also plan filing. Moreover, about a dozen other clear channel stations, including those of the networks, are understood to be considering applications which, if granted, would make them as powerful as WLW — the world's largest station.

The KFI application seeks a directional antenna which would be designed to suppress its signal to the West to prevent dissipation of its energy over the Pacific Ocean and intensify it up and down the Pacific Coast. KDKA, noted as a pioneer station, for a half dozen years has been experimenting with superpower up to 400,000 watts in after-midnight experiments.

Under present Commission regulations, the maximum power allowed clear channel stations is 50,000 watts. WLW is using 50,000 watts regular and 450,000 watts experimental.

A number of clear channel stations, through counsel, have contended that the Commission should first hold a hearing on the matter of revising its regulations to make 50,000 watts minimum rather than maximum power. They maintain that hearings on the specific applications would be premature if held prior to a declaration of policy by the FCC and, in fact, in violation of the existing regulations.

Whether the FCC will consider these contentions has not been indicated. In any event, it is expected that the issue will be raised at the Sept. 24 hearing unless some action is taken beforehand.

Newspaper Guild Invites Writers of Radio News

FURTHER recognition of the journalistic status of newsmen writing and editing for radio was accorded at the recent New York convention of the American Newspaper Guild, organized by newspaper reporters for the purpose of collective bargaining and better working conditions, when it invited any employe of a radio news service devoting the major part of his time to editorial work to join local guilds. The constitution was amended to include such workers, the phrasing being such as to permit membership of news gatherers and editors attached to broadcasting stations as well as to newspapers, press associations, newsreel companies or newsphoto agencies.

IS IT *true*

WHAT THEY SAY ABOUT

LANG-WORTH?

SOMETIMES WE WONDER OURSELVES!

We've had so many nice things said about our Planned Program Service we're apt to go "gaga" any minute with embarrassment.

So we're going to the Convention! Yessir, Cy Langlois and Ralph Wentworth, in person, have decided to turn detective. We're going to set up headquarters in the Stevens Hotel and meet these subscribers who are doing all the boasting—face to face.

We're bringing all the evidence—hundreds of tuneful selections, hand-picked from the world's richest storehouse of musical treasure—Public Domain. Dance music, concert, salon, vocal quartette, chorus, novelty—an inexhaustible supply—free as the air!

And with us go the Lang-Worth Quintuplets—five brand-new radio series, looking for local adoption—yes, there'll be a christening! If you're in Chicago, don't miss it! Let's get this thing settled once and for all—

IS IT TRUE WHAT THEY SAY ABOUT

LANG-WORTH FEATURE PROGRAMS, Inc.
A DIVISION OF LANGLOIS & WENTWORTH, Inc.
420 Madison Avenue New York

N. A. B. Convention Headquarters
Stevens Hotel • Chicago

Flashing

SOUND ENGINEERING

Symbol of sound engineering and swift flight . . . Germany's great new zeppelin *Hindenburg*, which, like RCA's broadcast activities, serves the public in the air.

RADIO CORPORATION OF AM

EVERYTHING IN RADIO FOR SERVICE IN COMMUN

XUM

g through Space

...aloft and invisible!

IN BOUNDLESS SPACE; in all fields of radio, RCA pioneered. For RCA was first to use the airwaves for international communications... domestic communications... broadcasting. Today, America has seen one RCA service of the air grow, from a small beginning to a point where now the words...

"This is the National Broadcasting Company!"

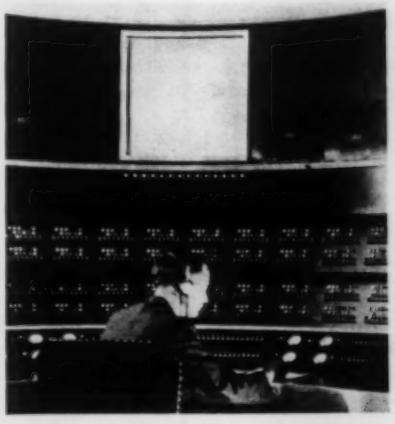
...are heard from early morning until late at night by millions in the United States and Canada... words synonymous with radio's best entertainment.

Thus again RCA comes to the fore. The National Broadcasting Company, one of the Radio Corporation of America's services, operates the largest networks in the world. Stretching from coast to coast, reaching from Canada to Florida, the NBC Blue and Red networks comprise 96 stations, linked together by specially engineered telephone wires.

Through these vast networks, NBC serves millions daily with every type of program. And, in addition to offering a complete broadcast advertising and program building service to advertisers, maintains NBC Artists Service for the provision of radio talent of all kinds. So, through the National Broadcasting Company, RCA performs still another service in radio.

By applying knowledge of the problems of broadcasting to the manufacture of its radio products, RCA assures the buying public of "pre-tested" quality. Some day, the vast store of experience gathered by RCA in sound engineering will lead to the engineering of *sight!*

Only RCA is active in all branches of the radio industry. That's why RCA merits true *confidence.* And, since confidence is a mighty sales factor, RCA dealers do a better business!



Master Control Room at Radio City

THESE ARE SOME OF NBC'S BROADCASTING "FIRSTS":

NBC Music Appreciation Hour, with Walter Damrosch conducting, reaching millions of school children throughout the nation, inaugurated on combined WEAF-WJZ networks... 1928.

First to use glass curtain, shutting off audience noises from broadcasting studio stage... 1930.

First 'round-the-world broadcast by Pope Pius XI on combined networks in 1931.

Light pack set, a foot square and seven inches thick, introduced by NBC... 1933. Used by "roving reporters" at President Roosevelt's inauguration.

First to introduce improved mobile short wave transmitter capable of broadcasting on a national network and maintaining constant two-way communication... 1933.

First to introduce improved short wave relay apparatus for broadcasts from aircraft and similar uses... 1933.

—plus many more outstanding "firsts" that stamp NBC *first* among the networks of the world.

RCA MANUFACTURING CO., INC. • RCA COMMUNICATIONS, INC.
NATIONAL BROADCASTING CO., INC.
RCA INSTITUTES, INC. • RADIOMARINE CORPORATION OF AMERICA

Listen to "The Magic Key of RCA" on NBC Blue Network every Sunday, 2:00 to 3:00 P. M., E. D. S. T.

MERICA · *Radio City* · NEW YORK

COMMUNICATIONS... BROADCASTING... RECEPTION

XUM

BROADCASTING and Broadcast Advertising

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Roosevelt and Radio

EVER SINCE the present administration took office more than three years ago there have been repeated insinuations that it looked kindly upon having the government enter the field of broadcasting. It was simply waiting for the opportunity to start some sort of system of stations of its own, we have heard. At times these suspicions seemed to have some basis of fact, but always it developed that some underling "brain-truster" had concocted an idea which was promptly squelched upon being brought to the attention of the higher councils.

If there is any doubt as to how President Roosevelt himself feels about Radio by the American Plan, one has but to read his message to the industry, sent through BROADCASTING and published in this issue. The language is clear and concise. He expresses his faith not only in American broadcasting but in American broadcasters.

The President's message is significant not only for what it says but for what it implies. In a few terse paragraphs he covers practically every broad question of government and its relationship to broadcasters, about which there has been concern. We have wondered about government ownership, about monopoly and about future developments. "There should be no monopoly in the moulding of public opinion, either government or private," states the chief executive.

Today the major problem on the doorstep of the broadcaster is that of future services —television, facsimile and high-frequency broadcasting. There are many interlopers who would grab off these channels for their own private, political or propagandistic pursuits. Even the government departments are seeking more than half of the available spectrum.

The President is conversant with these impending developments. He gets periodic reports from every government agency and in that manner he has acquired a broad general knowledge of the status of science, art and industry. In his message to the broadcasters he makes clear what the broadcasters themselves have maintained—that these new offshoots of radio are the logical heritage of the broadcasters of today.

"I have an abiding faith in American inventive genius," the President wrote, "and in the ability of the broadcasters to utilize these new developments in a way that will improve their service to the nation as a whole."

As we view it, only one thing was left unsaid by the President. Broadcasters have been pleading for three-year licenses as against the six-month authorizations now issued. The law permits three-year licenses. Without them the broadcasters practically exist on a month-to-month basis. The President talks of improved public service and "increased industrial stability" for the broadcasting industry. That stability can only come with a franchise which will allow the progressive, law-abiding station to administer his business without undue duress.

Even without a stated commitment on longer licenses, however, we feel the President gives new courage and incentive to broadcasters in his message. On behalf of the industry, we express appreciation and thanks.

Ready for the Future

VIEWED in retrospect, the FCC hearings on the future uses of the higher frequencies, reported in detail in this issue, bear out our contention from the outset, namely, that these new channels of communication should be allocated to furnish the greatest service to the greatest number of our people. Thus we retain our conviction that, particularly in view of their fine showing at the conference, priority belongs to those now furnishing such services —particularly to broadcasters, who will not be found lacking in capital and enterprise when television, facsimile and local apex services burst their experimental bounds.

We recognize, of course, the rightful priority of services devoted to safety of life and property, but from what we gathered as close observers at the conferences their demands are not irreconcilible with those of the broadcasting and set manufacturing industries, whose own trivial differences as to wave band allocations for television ought easily to be reconciled.

We regard as untenable such demands as those of the government, which asks for more than half the proposed new spectrum; of the educators, who through Federal Commissioner of Education Studebaker ask for a block of frequencies that (marvelous to contemplate, politically!) will give every one of the 127,000 school systems of the country its own station; and of such nebulous services as radio-typewriters for business houses, which are private in character and will occupy far more of the spectrum than they deserve. Of course, the government demands—and those of Dr. Studebaker, who even in these days of technological unemployment said that "by a slight increase in the size of classes the cost of a few teachers to serve under the traditional pattern would be saved"—may be further manifestations of the government's insistence upon entering private fields, but we doubt whether the administration's higher officials really know what these men are proposing.

Private operators and experimenters, not the government, are offering and have offered the facilities that will best serve the people at large. The answer to the governmental demands was simply stated at the conference: That all private operations can quickly be commandeered for government use by a mere presidential edict in time of stress or emergency. We are all Americans and that means we are all ready to plunge in when need demands, but in peacetime our American credo in radio as in other fields of business is to let private enterprise do the developing. The fact that the administration is cognizant of broadcasting's great day-by-day service to the American people is well expressed in President Roosevelt's letter in this issue.

The presence of so many broadcasting executives and engineers at the hearings indicated their keen appreciation that, as Comdr. Craven said, "radio is at the crossroads". More than that, we can say for the broadcasting industry that it is ready to pursue the proper paths the FCC will direct when it determines what services shall utilize these new avenues of the ether, and how.

It Won't Happen Here

ONE WOULD conclude from the conversation he hears that the NAB convention in Chicago will be more like a Latin American revolution than a business meeting of a great American industry. To us it seems shameful that factional differences should run to such extremes.

Many harsh words have been uttered during the last year. The trouble centers around copyright. The major networks and a substantial group of independently owned stations have been at issue. The problem is a dollars-and-cents one. The accusation is that the networks, as against the independents, got the better of a business bargain.

All that may be true. But it does not seem to be any basis for threatening the unity of an industry that must buck the line together if it is to keep its strength and identity. There has been much unnecessary waving of red flags, in our opinion. Copyright, after all, is just one of many problems which broadcasting faces. It is wrong to allow that one issue to becloud all others and threaten to break up a trade association which otherwise has done a satisfactory job of fighting radio battles on the national front.

After all the tumult and shouting is over, it is our guess that the divergent viewpoints will be reconciled. There are plenty of good brains in the NAB membership, and the preponderance of good sense urges the conviction that only in unity is there strength.

CRITICS of radio can be found abundantly in Congress, particularly when it serves their political ends. Occasionally, however, one hears words of praise, such as the comments of such men as Senators Borah and Dickinson, who figured prominently in the recent Republican convention. Borah informs BROADCASTING that he has only "words of commendation" for the fine work of radio, and that he has "never heard a word of complaint". Dickinson said he regards radio as the most important political medium because the candidate gets "almost immediate reactions".

We Pay Our Respects To —

HERBERT VESTNOR AKERBERG

EVER SEEN a living portrait of the busiest man in the world? If not, just visit Herbert Vestnor Akerberg, at CBS headquarters in New York City. The problems of 103 affiliated CBS stations converge on his desk. Nobody bothers to write. It's the telephone all day long. With one it is the writing of a new contract; with another, the clearing of time for a dedicatory program; and a third wants to know how this assignment shift or that would work out; copyright bothers the fourth, and then there is always the constant figuring of new outlets here or shifts there.

At CBS they call his job station relations. A better title would be general utility man for network operations. The job calls for knowledge of every phase of station-network operations, including placement of accounts, station markets and coverage, equipment and antenna design, copyright, contract forms, and in fact everything except actual programming.

When Sam Pickard decided last month to become a gentleman farmer down in North Carolina and relinquished his active duties as vice president for station relations, it was only logical that Herb Akerberg should succeed him. Mr. Pickard remains as a CBS vice president by remote control, but the assignment of vice president in charge of station relations falls upon the capable shoulders of Akerberg. For the last two years he has been Pickard's chief assistant, and station relations manager.

A sort of born diplomat, Herb Akerberg has a knack of saying the right thing at the right time. His forte is negotiation—and it takes real ability to keep the records straight in that sort of activity.

Herb Akerberg had much to do with "building" CBS, literally, because as an engineer for Bell Telephone Laboratories in 1929 he was assigned the job of installing WABC when that station became the owned-key station of CBS. He never returned to Bell Labs. From an engineering capacity with the young network he was assigned to development and planning, acting as a sort of general assistant to William S. Paley, CBS president. The phenomenal growth of CBS since then is known by everyone identified with radio, and in the background there was always Herb Akerberg, diligently applying himself to technical plans for expansion from the 18-station original network to the "world's largest" single network.

Like so many in radio, Herb Akerberg started out as an amateur operator in his native town of Columbus, O. Although it isn't generally known, he was one of the first engineers to engage in synchronized broadcasting — that method of simultaneous operation of stations on the same channel which in the early days was looked upon as the panacea of all of radio's technical ills. With WAIU, Columbus, first as its chief engineer and then as its manager in 1927 and 1928, he synchronized the station experimentally with KMOX, St. Louis, and later with WKRC, Cincinnati, under the rigid supervision of the old Radio Commission. These experiments attracted nationwide attention. Young Akerberg was called in those days the "radio Bolshevist" because of his efforts toward setting up networks of stations on single frequencies.

On June 24 last, exactly 38 years had passed since the birth of Herbert Vestnor Akerberg in Columbus. His parents were Swedish and his father had been employed by the Pennsylvania Railroad. During his early schooling in Columbus he took to amateur radio, and when only 14 built a wireless station in Columbus. Never losing his technical interest in radio, he joined the Signal Corps of the Army during the World War, and taught code to pilot cadets at the training school at Cincinnati.

The war over, young Akerberg again hopped on the radio bandwagon and sold radio sets. In 1923 he built WPAL in Columbus and operated it until 1926 when he became engineer of WAIU, shortly afterward becoming its manager. It was during this period that he made the front pages of many newspapers because of his pioneering synchronization efforts.

He accepted a position with Bell Laboratories in 1928 to further his experimental work and the following year was assigned the task of installing WABC. Even before that job was completed he was named assistant chief engineer under Paul A. Greene, and when the latter left CBS a year later, he became chief engineer. The title of research and development engineer was given Akerberg in 1931 after CBS officials discovered his natural bent for figuring out complicated things. He was made a sort of trouble-shooter for the network.

When the station relations job became more than a one-man undertaking, Akerberg found himself assistant to Vice President Pickard. It soon developed into a full-time assignment and in 1934 he became Mr. Pickard's assistant and the following year station relations manager. Last month he was promoted to a vice presidency. It was he who negotiated the recent affiliation and purchase arrangements with WJR, Detroit; WWL, New Orleans; KNX, Los Angeles, KSFO, San Francisco and WEEI, Boston.

No one has ever been able to figure out what hobbies, if any, go with Herb Akerberg aside from his work. He is a 32d degree Mason and a Shriner. With the lovely Mrs. Akerberg (formerly Florence Miller of Columbus), he resides in New York close to CBS headquarters.

PERSONAL NOTES

MRS. PHILIP G. LOUCKS, wife of the Washington attorney and former NAB managing director, is recovering at Sibley Hospital, Washington, from a serious illness which followed giving birth to a 7 lb. 7 oz. son, born June 13. The boy was named Michael Philip.

NAYLOR ROGERS, general manager of KNX, Hollywood, dislocated his hip June 12 and was taken home to recuperate after a short stay at a hospital.

GORDON EWING has been promoted to sales manager of WBZ, Boston, succeeding Griffith B. Thompson, who has joined the NBC sales staff in New York. Ewing will be in charge of NBC sales coverage in New England.

GEORGE BIGGAR, promotional director of WLS, Chicago, left Chicago in June for the Texas Centennial and National Folk Festival.

HAROLD GRAY, former announcer of WJSV, Washington, has joined the sales and production staff of the U. S. Recording Co., Washington.

BOB KAUFMAN, formerly publicity director and program director of CBS, Chicago, has been appointed manager of KMA, Shenandoah, Ia.

HARRISON HOLLIWAY, newly appointed general manager of KFI-KECA, Los Angeles, left June 12 on a trip to New York and Washington, planning to stop at the NAB convention on the return trip.

ARTHUR McDONALD has been appointed sales manager of KEHE, Los Angeles. At one time he was on the sales staff of KHJ and KNX, later sales manager for Standard Radio Inc. He had not been in radio the past year.

GERALD KING, manager of KFWB, Hollywood, and George Fischer, publicity director, won prizes at the annual Warner Bros. golf tournament in June.

H. J. BRENNEN, Robert M. Thompson and S. A. Pickering, of the executive staff of WJAS, Pittsburgh, left June 16 on a European vacation and will return about Aug. 1 on the *Queen Mary*.

LLOYD E. YODER, NBC western division press relations manager, Philip C. Lasky, general manager of KSFO and Tom Breneman, general manager of KFRC, are among the 28 prominent San Franciscans who are to select the finest outdoor girl from that city from high school students to represent San Francisco at the California Rodeo in Salinas, Cal., July 16 to 19, inclusive.

PAUL McCABE, NBC revenue accounting supervisor in San Francisco, has resigned to become associated with a Los Angeles concern. His successor at NBC is A. J. Diedericks.

WESLEY I. DUMM, president tof the Associated Broadcasters Inc., which operates KSFO, San Francisco, and Philip G. Lasky, general manager of the station, are in New York to confer with CBS officials. Final arrangements are to be made with CBS for leasing of KSFO. Lasky will remain in the East to attend the NAB convention before returning to his desk. Dumm is scheduled to return to San Francisco this coming week. Both executives are accompanied by their wives.

PAUL KESTEN, CBS vice president, was due to return to New York about July 1 from a vacation trip in Europe.

MISS ANGELA McCOSKER, daughter of Alfred J. McCosker, president of WOR and chairman of Mutual, was to leave July 1 for a two-month trip to Europe with a party of eight young ladies.

J. H. HARDY, lately with Richman & Associates, Los Angeles, and once with KIEV, Glendale, Cal., has joined the sales staff of KRKD, Los Angeles.

QUIN RYAN, broadcast manager and commentator of WGN, Chicago, expects to spend the hay fever season on his newly acquired power boat in Lake Superior, a haven for sufferers from that malady. Blair Walliser, production chief, another boating enthusiast, expects to take in the Mackinac yacht race in his sloop.

RICHARD STANNARD, formerly on the sales force of KGB, San Diego, and KHJ, Los Angeles, early in June joined the commercial department of KFWB, Hollywood, to take the newly-created post of sales promotion manager.

EDWIN W. CRAIG, executive head of WSM, Nashville, and Mrs. Craig plan to sail for Europe July 2 for a vacation. Mr. Craig, who has been prominently mentioned for the NAB presidency, therefore will be unable to attend the Chicago sessions July 6-8.

BENEDICT GIMBEL Jr., president of WIP, Philadelphia, was to return from London July 1 in time to go to the NAB convention.

DR. MAX JORDAN, Central European representatives of NBC who came over on the maiden voyage of the dirigible *Hindenburg* in May, addressed the Overseas Writers of Washington June 18. He was scheduled to return late in June on the airship.

ROBERT KAUFMAN, formerly with KELW, Burbank, Cal., and later in the agency business, has joined the sales department of KEHE, Los Angeles.

A. J. MOSBY, owner and manager of KGVO, Missoula, Mont., was in San Francisco on June 17 during his Pacific Coast tour contacting advertising agencies and clients.

CHARLES KAPLAN, of the sales staff of WIP, Philadelphia, is convalescing at his Atlantic City home from an operation.

XUM

CLAIRE PATRICK, in charge of NBC's musical rights department in San Francisco, was married to Gregory Lance of Seattle, at Stevenson, Wash., on May 22, it was revealed when she returned from her vacation. They will make their home in San Francisco where Mrs. Lance will continue her affiliation with NBC.

JOHN BUSSELLE, 1936 graduate of the College of Emporia, has joined the sales and client service staff of WHB, Kansas City.

WEBLEY EDWARDS, manager of KGMB, Honolulu, was honor guest at a luncheon held in the Palace Hotel, San Francisco, June 16, attended by 40 radio and advertising executives. Fred J. Hart, vice-president and general manager of the Honolulu Broadcasting Co., which operates the station, was toastmaster. Edwards, who has been on the mainland since May 21, making a good will tour of the West Coast for KGMB, was to leave San Francisco June 27 for Honolulu.

HARRY ANDERSON, NBC sales manager in San Francisco, has returned to his desk, after a conference with network clients in New Orleans.

DAN WELDON, formerly on the sales staff of KROW in San Francisco, is now with KYA, that city, in a similar capacity.

BEHIND THE MICROPHONE

CARLTON KADELL, West Coast announcer, recently narrating the *Strange as It Seems* series on CBS, was selected to announce the Amos 'n' Andy series on NBC while the dialect duo spend the summer in Hollywood.

WILLIAM McGRATH, formerly of Philadelphia stations, has been named production manager of WNEW, Newark.

JAMES V. MacDONALD, for several years in charge of publicity for WEEI, Boston, as well as for Edison Electric Illuminating Co., Boston, has left the station to devote full time to Edison publicity. Lewis S. Whitcomb is handling WEEI publicity.

LEW STEARNS, graduate of the University of California at Los Angeles, has joined the announcing staff of KFAC, Los Angeles. Martin Provenson has resigned to go to Texas and Burton Bennett, former program director of the station, returned to become a staff announcer.

LEE HOAGLAND has returned to the announcing staff of KMTR, Hollywood, after several months absence. He takes the post of Fred Graham, who resigned to do transcription work.

HENRY CIESEL, announcer of WEBR, Buffalo, is back at the studios following his honeymoon in Washington.

WALLY WARREN has been transferred by Central States Broadcasting System from Omaha to Council Bluffs studios of KOIL.

ALOIS HAVRILLA, NBC announcer, current holder of the diction medal, sails for Europe in July to visit his Czechoslovakian birthplace.

TOM BREEN, formerly with NBC, New York, and Hal Chambers, formerly of KJR-KOMO, Seattle, and KGB, San Diego, in June joined the announcing department of KFWB, Hollywood.

J. E. DOYLE, radio editor of the *San Francisco Chronicle* for the last three months has resigned and on July 1 takes a similar position with the *New York American*. His successor in San Francisco is Herb Caen, formerly radio editor of the *Sacramento* (Cal.) *Union*.

AND THEY CALL BROADCASTING A MAN'S GAME!

FEMININE SIDE OF RADIO—Among women radio station managers are: Top row (left to right) Mrs. Edythe Fern Melrose, WJAY, Cleveland; Mrs. Jessie Jacobson, KFBB, Great Falls, Mont.; Miss Bernice Judis, WNEW, Newark; lower row, Lillian E. Kiefer, WMBQ, Brooklyn; Marie W. Vandergrift, WPAY, Portsmouth, O.; Joy True, KOH, Reno, Nev.; Mrs. R. W. Britton, KGBU, Ketchikan, Alaska.

DEADLIER than the male may be the female of the species—but they do make good radio station managers, we are told on competent authority. A survey by BROADCASTING discloses that among the 630-odd stations in the United States there are about a dozen women managers, who in several cases are also station owners. Most of them are married, and happily, according to our reports.

Modesty may have accounted for the failure of some of them to respond to our request for photographs, but the best list we could compile of women top executives of American stations, besides those pictured above, is as follows:

Mrs. Margaret Haymond, KMO, Tacoma, owned by Karl Haymond; Mrs. W. J. Virgin, owner and manager of KMED, Medford, Ore.; Mona J. Pape, WHBL, Sheboygan, Wis.; Bertha Jackson, WCAX, Burlington, Vt.; Mrs. M. J. Milberne, WCNW, Brooklyn; Mary E. Beehler, KGEK, Sterling, Col. There may be a few others we haven't heard about, but if they are they have been appointed since our 1936 Year Book was published.

There are, of course, quite a few women commercial managers—and mighty good sales executives they are, too, we are told. And there are even more women program directors, but only a handful of regular announcers are females for the peculiar reason that, except for specialty programs, they don't seem to click with the American audiences as they do in Europe.

It was with regret that BROADCASTING learned of the retirement of Mrs. J. L. Bush from the active management of WDZ, Tuscola, Ill., one of the oldest broadcasting stations in the United States, which recently was sold to a new corporation headed by Edgar Bill, operator of WMBD, Peoria, with Clair Hull, of WMBD, as the new manager. Mr. and Mrs. Bush, however, retain a 25% interest in the station.

Also, we learned that Elsie L. Budd is no longer manager of WLNH, Laconia, N. H., a post she held when the former manager died suddenly last year. Miss Budd, however, continues with the station as its assistant treasurer.

PAUL PIERCE, announcer of KFWB, Hollywood, is the father of a nine pound boy born in June.

JOHN TOBOLA, former announcer and operator of WMFJ, Daytona Beach, Fla., has joined the announcing staff of KELD, El Dorado, Ark.

JOHN McTIGUE, NBC press department in Radio City, is the father of a boy, his first child, born June 20.

THOMAS FREEBAIRN-SMITH, staff announcer of KNX, Hollywood, left the middle of June with the Hollywood Cricket Club for a tour of the Northwest, but will return to the air late in July.

MRS. HERM BREDERO, conducting a daily program on 2GB, Sydney, Australia, under the name of *Auntie Val*, will arrive at Los Angeles Harbor on the *Mariposa* July 11 for a three-month trip.

CHARLES ANDERSON, doing heavy roles in the *Sunday Players* transcription series in Hollywood, where he was also on KFI and KFWB, has returned to Denver where he is announcing on KOA.

CLIFF ANDERSON, in charge of NBC program traffic in San Francisco, was recently married to Adele Hooper of Milbrae, Cal.

ARNOLD MAGUIRE, radio writer, producer and actor, will join the production department in NBC's San Francisco headquarters on July 6.

GORDON B. CASTLE, formerly of Campbell-Ewald Co. and WGR, Buffalo, has joined WJR, Detroit, as announcer and publicity director.

DICK LAPE, announcer of WEBR, Buffalo, received a degree in June from State Teachers' College.

JOSEPH BOLEY, announcer of WJAS, Pittsburgh, has resigned to take up advanced work in public speaking at the Cape Cod School, Martha's Vineyard.

PAUL ZENS, of the music copyright division of KNX, Hollywood, and Miss Goldie Hardesty were married in Yuma, Ariz., June 14.

CHARLES WISE, formerly publicity director of WKRC, Cincinnati, sailed June 17 for a two-month tour of Great Britain, Scotland and France, to make a study of broadcasting in those countries.

DON HANCOCK, formerly of WLW, Cincinnati, has joined WBBM, Chicago.

ROBERT HALL, formerly of WOR, Newark, has joined WIP, Philadelphia.

LORNIE WILKINSON, program director of WTAQ, Green Bay, Wis., is the father of a baby girl.

C. WHITNEY SHEELEY and Milton Royce, operating a radio agency in Hollywood as Sheeley-Royce, have dissolved the partnership. Mr. Sheeley will continue the business while Mr. Royce will free lance.

DON WILSON, NBC announcer on the Jack Benny program, is the master of ceremonies of the new Jell-o program which started June 28 while Benny is in Hollywood on a picture assignment.

EDWIN JAY, announcer and pianist, has joined the staff of WINS, New York.

JACK ZEIGIN, announcer and publicity director of WIBM, Jackson, Mich., has resigned.

LOUIS AIKEN, Jr., formerly with WXYZ, Detroit, has joined the announcing staff of WCKY, Cincinnati.

WADE WATSON, formerly of WNEW, Newark, has been named to the production staff of WBNX, New York.

BEN HARKINS, formerly on the production staff of KOMO, Seattle, Wash., has joined the announcing and artist staff of KJBS, San Francisco.

Broadcasting Problems To Feature Program of West Coast Advertisers

Mr. Dixon

SPOKESMEN for radio and advertising from all parts of the West Coast will be in attendance at the 33d annual convention of the Pacific Advertising Clubs Association to be held in Seattle July 5 to 9. The radio departmental session July 7 will be presided over by C. P. MacGregor, president of MacGregor & Sollie Inc., Hollywood transcription producers.

Sydney Dixon, sales manager for the Hollywood division of NBC, will be one of the principal speakers at the radio departmental meeting, having for his subject, "Radio Advertisers' Guest List". Nathan Danziger, general sales promotion and advertising manager of the Golden State Co. Ltd. (dairy products), who is also president of the San Francisco Advertising Club, is to speak on "The Golden State of the Morning Air". There will also be three talks of five minutes each. Speakers and their topics are H. J. Quilliam, manager, KIRO, Seattle, "Independent Radio Stations' Picture"; Herbert Poole, Seattle, "Selling Radios by Radio", and Ben Tipp, Seattle, "My Experience in Selling Diamonds with Radio".

Mr. MacGregor

According to present plans a special broadcast has been arranged for the radio departmental meeting through KOMO. Talks, interspersed with popular nationally known programs, will be heard.

On the committee with Mr. MacGregor are H. M. Feltis, sales manager of KOMO; H. J. Quilliam, manager, KIRO; Tom Schafer, manager, KVOS, Bellingham, Wash.; Harvey Wixson, manager, KHQ, Spokane; T. W. Symons, Jr., manager, KFPY, Spokane; Norman Storm, commercial manager, KOL, Seattle.

Stations in Shreveport To Enter New Quarters

KWKH and KTBS, Shreveport, La., will move into new studios and offices, occupying the entire second floor of the Commercial Bank Building in Shreveport in mid-July, according to John C. McCormack, general manager.

The plans call for three studios designed by Johns-Mansville sound engineers. The floors, walls and ceilings will be "floated" or "cushioned", so that no shock or sound can be transmitted to them from the building or from one studio to another. The studio equipment will be RCA high-fidelity. In addition to three studios and two control rooms there will be 10 offices, an audition room, and accommodations for spectators. The entire floor will be furnished in modernistic style and will be air-conditioned throughout.

W

"=THAT'S NEWS!"

G

The Scranton Times.

The Times Performs a Public Service

IN complete harmony with its traditional policy of service to the people The Scranton Times was privileged to be the first to officially and definitely announce to the public in this section of the anthracite region that an agreement to raise the suspension order at the mines had been reached. It was news of first importance to tens of thousands of mine workers and hundreds of thousands of others indirectly affected by the decision.

The Times was able to inform the anthracite communities and relieve their suspense in spite of the fact that the news came long after its hours of publication. That was made possible through an arrangement with WGBI, Scranton's enterprising local commercial radio station. Within a moment or two of reception of the news from its staff writer on the scene, The Times released the good tidings to WGBI and they went out into the ether and into radio receiving sets in thousands of homes up and down the two valleys. To WGBI The Times expresses its appreciation for a fine courtesy.

Editorially the Scranton TIMES, one of the most influential inland papers in the United States, pays its respects to the WGBI ideal of public service. There is no connection between this Station and the newspaper. No charge was made for the time involved.

Anthracite coal basic industry of Lackawanna County, Penna., dictates the lives of 24,106 mine workers and their families. Annual wages of $34,244,100 are paid — approximately $114,147 daily.

Any impending suspension of work that might cut off that daily wage was "news" of the highest degree.

WGBI brought that news to thousands of its listeners saving them tens of thousands of dollars.

Thus Radio scored again!

WGBI is the only regional station serving Northeastern Pennsylvania and adjoining New York State. Its studios and transmitter are located in Scranton, the third largest city in Pennsylvania and the heart of the seventeenth largest Metropolitan area in the United States.

National Advertisers using more than 17 stations cannot afford not to use WGBI. Those using more than 2 stations in a regional campaign in Pennsylvania must, of necessity, include WGBI. Practically all National advertisers using spots on a National basis are numbered among WGBI's fast-growing clientele.

Recently installed new antenna system, including the latest type of vertical radiator, insures maximum signal.

Recent surveys prove conclusively that advertisers desiring complete coverage in Northeastern Pennsylvania *must* use WGBI.

YOURS FOR THE ASKING

You'll be interested in the Survey Maps made since the installation of our new Antenna System.

B

Frank Megargee, President
Scranton Broadcasters, Incorporated,
Scranton, Pa.

I

FAY PATTEE has been appointed assistant to Henry C. Maas, NBC sales traffic manager in San Francisco, succeeding Fern McNeil, resigned. Miss Pattee was transferred to her new post from the fan mail department.

CHARLES FOLL, announcer at KROW, Oakland, Cal., has announced his engagement to Minnie Shank of that city. The wedding is scheduled for Aug. 16.

JAY SIMS, former NBC announcer in San Francisco, early in June joined the announcing staff of KEHE, Los Angeles.

DARRELL DONNELL, news editor of KYA, San Francisco, who recently signed his third contract with the Hearst organization and is observing his fifth year as a news broadcaster and commentator, has taken on the additional duties of radio editor of the *San Francisco Examiner*, with Frank Smith as his assistant. Donnell succeeds the late Oscar H. Fernbach.

SCOTT WEAKLEY, production manager of KROW, Oakland, and Dell Perry, staff pianist, have collaborated on writing a song entitled "Since My Major Love Gave Me The Gong", which got its first airing over that station June 1.

HERB ALLEN, announcer of KYA, San Francisco, has taken on the additional duties as editor of the six-weekly quarter-hour *Sports Highlights of the Air*.

WARD KEITH, program director of W9XBY, Kansas City, narrowly escaped injury while changing tires along a highway when another car crashed into his machine. Keith leaped in time but Bill Squyers, W9XBY singer, suffered fractures of both legs.

JOSEPH BETZER, oldest announcer on the staff of WEBR, Buffalo, has been named chief announcer.

WALTER KNOBELOCH, formerly of WCSC, Charleston, S. C., has joined the announcing staff of WIS, Columbia, S. C. Grame Fletcher, formerly of WFBC, Greenville, S. C., also has joined WIS.

GILBERT BAYEK, whose apprenticeship the past year has been served at WPRO, Providence; WLBZ and WABI, Bangor, Me.; and WLLH, Lowell, Mass., has joined the announcing staff of WHDH, Boston.

SID SCHWARTZ, head of the publicity department of WNEW, Newark, is spending his honeymoon in Havana.

BRUCE COLLIER, formerly of Twentieth Century-Fox in Chicago, has been named continuity editor of KFYO, Lubbock, Tex.

HUGH WALTON and Taylor Grant, announcers of WCAU, Philadelphia, have composed six songs, two of which, "I Live for You" and Heartbroken Melody" have been performed on CBS. The other four are "Dream On", "When I Make You Mrs. Me", "Day Dreams" and "Now I Am Blue".

RALPH WONDERS, head of the CBS Artists' Bureau, New York, arrived in Hollywood June 15 to open a coast office for his department.

ARNOLD MAGUIRE, continuity editor of KFRC, San Francisco, joins the production department of NBC in that city on July 6. He succeeds Almon D. Knowles, who was associated with NBC for three years as producer of various programs before moving to southern California.

REG DOUGLASS, chief announcer of CKNX, Wingham, Ont., had to quit writing the resume of a ball game he was covering when a foul tip caught him in the arm. Two minutes later Howard Bedford, program director, who had taken up the task, had his hat removed by a second foul ball. Douglass has been carrying his arm in a sling.

Charles Wakeman Wins Atlantic City Award for Best News Broadcasting

Mr. Wakeman

AGAIN recognizing oral journalism along with other news services, the Atlantic City Press Club at its annual Headliners Frolic June 30 awarded its gold medal for the best news broadcast of the year to Charles Wakeman, announcer of WJAS, Pittsburgh, for his broadcast over that station and CBS of an eyewitness account of the recent Johnstown floods. Honorably mentioned with Mr. Wakeman were Walter Glaus, WJAS engineer, and Bob Moe, CBS engineer.

Eight other awards for the best newspaper, news reel, news photo and magazine feats of the year were made, with a half hour devoted to a broadcast of dramatizations of the events over CBS. The radio award was accepted on behalf of Mr. Wakeman by Paul White, CBS director of special features.

Winners in the radio division last year were NBC, for its first stratosphere broadcasts, and CBS, for its coverage of the Chicago stockyards fire.

Mr. Wakeman entered radio when he was only 16, having formerly been with American Broadcasting Co. in New York, handling sports and special events. Himself a former football, track and swimming star at Penn State, and holder of several championships, his specialty has been sports, and he handles all such features for CBS that emanate from Pittsburgh. In 1935 he was winner of the H. P. Davis Memorial Announcers Award given annually by the widow of the former radio head of Westinghouse.

Another Free Offer

STILL another "free offer" of continuities from commercial interests came last month to stations from the Save the Surface campaign, directed by Lenore Kent with headquarters at 2201 New York Ave., N. W., Washington, D. C. The campaign is underwritten by the National Paint, Varnish and Lacquer Association. If stations decide to try to sell the continuities to a local paint dealer or manufacturer, Miss Kent suggests she ought to be paid for the scripts!

BEST ANNOUNCER — Henry J. Kaufman (left), head of the Washington agency bearing his name, presents 1936 trophy for best local commercial announcer to Larry Elliott, WJSV.

Larry Elliott Awarded D. C. Announcing Prize

LARRY ELLIOTT, veteran announcer of WJSV, Washington CBS key, was voted the best local commercial announcer for 1936 in the annual trophy contest conducted by Henry J. Kaufman Advertising, Washington agency handling numerous local accounts. The two runners up were Bill Coyle, who won the prize last year, and Hugh McIlrevey, both on the staff of NBC's stations WRC and WMAL.

Judges in the contest were John Heiney, radio editor, *Washington Post*; James Chinn, radio editor, *Washington Star*; Jack Stone, radio editor, *Washington Herald*; Carl Sprinkle, radio editor, *Washington News*; William D. Boutwell, U. S. Office of Education; E. H. Reitze, president, Capitol Radio Engineering Institute; Martin Codel, publisher, BROADCASTING; Comdr. W. J. Ruble, U. S. Navy; Maurice Lowell, WPA radio project; Dr. H. G. Dorsey, U. S. Coast & Geodetic Survey.

Midcontinent Oil Series

MIDCONTINENT PETROLEUM Co., Tulsa, Okla., has decided on plans to broadcast a spot program, 15 minutes long, three days a week, beginning early this fall. Transcriptions will tell a romance of newspaper life and the transcriptions have been arranged for with the Chicago branch of the Columbia Phonograph Co. The name of the program will be *Diamond City News* and R. J. Potts & Co., Kansas City, is the agency. The new programs will be on the air early evening hours during a 13-week contract.

Armstrong System

(*Continued from page 72*)

and receivers are required for this system? And what are their costs?

A 1,000 watt transmitter designed for amplitude modulation calls for a peak-power tube capacity of 4,000 watts. Such a transmitter, designed for frequency modulation, would be a 4,000 watt transmitter. In terms of power rating and in terms of *dependably served* area transmitter costs for frequency modulation will be lower.

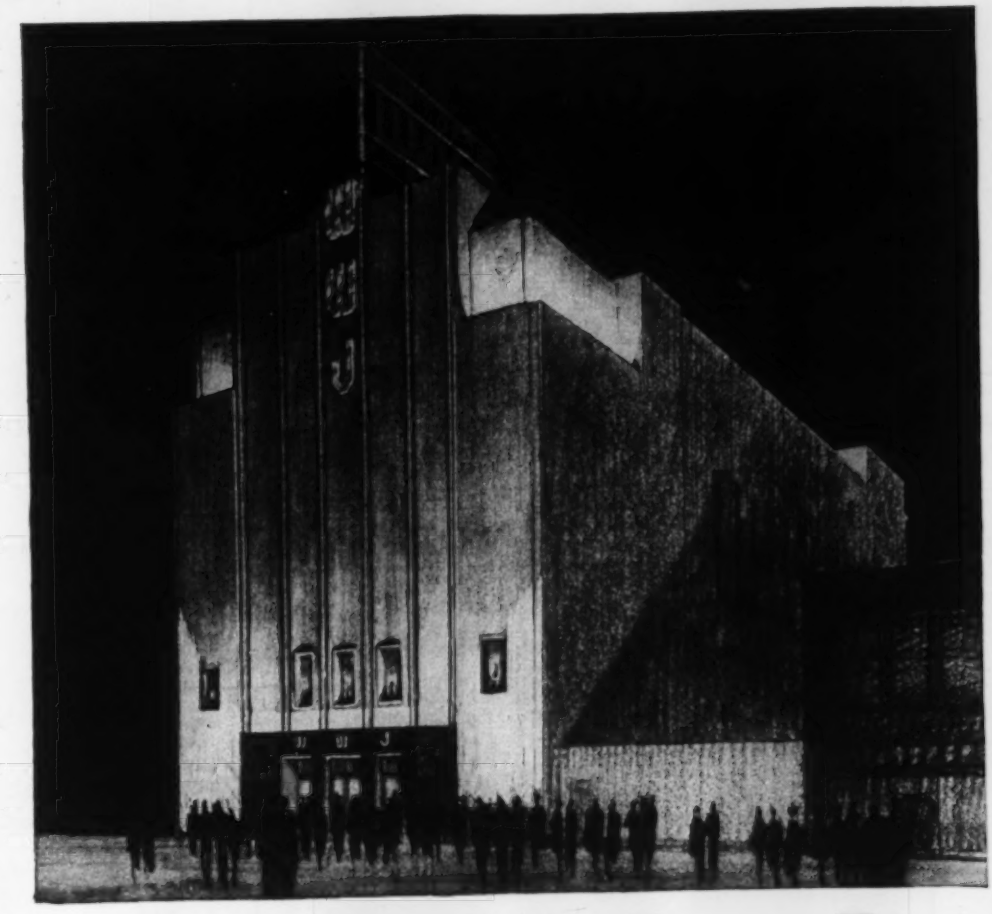
Receivers for the system will require an increase in the number of tubes over present good models which have 12 or 14. Perhaps 16 or 18 will be called for. The "bread-board" receiver used in our recent IRE demonstration had 22 tubes, no effort having been made during the development work up to that time to economize. But, there appears no thing which indicates that prices for the new receivers will fall far from prices now in effect on our good or better types of radios. If the expected service is there the cost of the tubes in the receiver is of wholly secondary importance.

Prof. Armstrong hopes that he can complete his 40,000-watt plant late this fall and, thereafter, carry through on the final stages of what has been—for an individual—an unusually elaborate, long-drawn, and extensive developmental program. He has expressed it as his desire to provide for everyone in the industry an opportunity to see for themselves what his system will do when operated as a full scale model. Since his own money goes into the project one is left in no doubt concerning his own convictions. As the radio industry well knows, he has been right several times in the past. If his expectations are realized what then?

He believes that, as with the D.C. and A.C. power systems of days gone by, both the new and the old may with small confusion and great advantage work side by side; that therein is sure to lie great stimulation for the art and the industry; that thereafter the best system, or the best combination of systems will—as it should—within a few years time prevail.

IN ITS June 15 story on Remington Rand's sponsorship of a new program on a 51-station hookup of regional networks, BROADCASTING erred in stating that this company has cancelled its *Five Star Final* show on WMCA and the Inter-City Network. BROADCASTING regrets the error.

WORK OF STUDENTS — Here are some of the examples of student participation in the CBS American School of the Air, in connection with the art broadcasts, part of the nationwide CBS educational series.



WWJ

Celebrates Sixteenth Anniversary.... Opens Fine New Studio Building

Thursday evening, August 20, 1936, WWJ will celebrate its sixteenth birthday. The feature of this program will be the formal opening of its new studio building, one of the finest, most modernly equipped radio broadcasting studio buildings between New York and the Pacific coast.

America's Pioneer Radio Broadcasting Station

WWJ 920 KILOCYCLES EST. AUG. 20, 1920

Owned and Operated by The Detroit News

SUNDAY, AUGUST 16, The Detroit News will publish a special Rotogravure Section announcing the birthday celebration and presenting features of WWJ's new studio building. Make your space reservations for this special Rotogravure section now!

CONTEST IS BEGUN BY GENERAL MILLS

GENERAL MILLS Inc., Minneapolis, during the week of June 22 started its first contest on the new CBS daytime hour, five days a week, calling it the Gold Medal Nomination Sweepstakes. The contest seeks a new name for the program, tentatively titled *Gold Medal Hour*. The contest closes July 11.

With the exception of one insertion in the *American Weekly* the contest is being promoted exclusively through the *Gold Medal Hour*. In addition to submitting a new name for the program the sponsor is also asking that each contestant check in the order of preference the six programs that make up the hour.

No limit as to number of entries is made, but each must be accompanied by sales slip or receipt showing the purchase of a package of any of the following Gold Medal products: Wheaties, Bisquick, Gold Medal Kitchen Tested Flour, Softassilk Cake Flour. The Nomination Sweepstakes is being merchandised in grocery stores by window posters and other types of posters that can be affixed on the products promoted. Official entry blanks are distributed exclusively through local grocers.

A total of 357 prizes will be awarded. Seven Graham Sedans will be given to the first seven winners; next 50 will receive a Fairbanks-Morse refrigerator and the next 300 will be given a Fairbanks-Morse table radio. Blackett-Sample-Hummert Inc., Chicago, has the account.

Coverage in Carolinas Offered by WIS-WPTF With Combination Rate

CREATION of a combination rate, both day and night, covering WIS, Columbia, S. C., and WPTF, Raleigh, N. C., whereby they will be offered national advertisers for intensive Carolina coverage, was announced June 17 by the stations, effective next month. Both are represented nationally by Free, Johns & Field Inc., with whom the combination rate was worked out in conferences in New York.

The night 15-minute joint rate is $90 and the 9 to 6 p. m. rate is $56 per 15 minutes and the early morning rate (7 to 9 a. m.) $40.

The stations are under separate ownership, WIS being owned by Liberty Life Insurance Co., and WPTF by the Durham Life Insurance Co. The sales plan contemplates minimum contracts of 15 minutes, and equal use of facilities on both stations, in the same time classifications. Where necessary, wire lines will be provided.

WIS operates on 560 kc., with 5,000 watts day and 1,000 watts night, while WPTF operates on 680 kc., in essentially the same power classifications. The combination rate structure was devised by G. Richard Shafto, manager of WIS; Richard H. Mason, WPTF manager, and H. Preston Peters, F. J. & F. vice president in charge of New York offices.

LUCIUS ROBERTSON, of the NBC statistical department, won slightly more than $1,000 in the Irish Sweepstakes recently, and Henry Heisel, of the RCA comptroller's department, won $2,200.

ATTACH THIS BALLOT TO YOUR
RADIO DIAL AS A REMINDER
PRIZE AWARDS—Just for NAMING THE GOLD MEDAL HOUR
It's Easy to Enter . . .
HERE'S WHAT YOU DO
1. Buy 1 package of any one of these four products: GOLD MEDAL "Kitchen-tested" Flour, Wheaties, Bisquick, Softasilk Cake Flour.
2. Be sure to get a sales slip or receipt from your grocer showing your purchase.
3. Listen to the Gold Medal Hour (see list of stations at left) and vote for the programs on that hour in the order of your preference. Use space provided on reverse side of this ballot.
4. Write clearly or print the name you choose for the Gold Medal Hour in the space provided on the reverse side of this ballot.
5. Write your name and address on the ballot and mail with your sales slip (see No. 2) to Gold Medal Nomination Sweepstakes, Minneapolis, Minn. Your entry must be postmarked on or before July 11, 1936.
7 Graham Supercharger SEDANS
50 Fairbanks-Morse Refrigerators
300 Table Radios
AVERAGE RETAIL VALUE $175.00
AVERAGE RETAIL VALUE $340.00
HEAR THIS GOLD MEDAL HOUR from MONDAY THROUGH FRIDAY over these STATIONS:
10 to 11 a.m. E.D.S.T.
9 to 10 a.m. E.S.T.
11 to 12 a.m. C.S.T.
9 to 10 a.m. P.S.T.
WABC — New York
WCAO — Baltimore
WHAS — Louisville
KFPY — Spokane
WEAN — Providence
WJSV — Washington
WFBL — Syracuse
WHEC — Rochester
WDRC — Hartford
WGAR — Cleveland
WOKO — Albany
WADC — Akron
WCAU — Philadelphia
WKRC — Cincinnati
WJAS — Pittsburgh
WJR — Detroit
WGR — Buffalo
WBBM — Chicago
KOIN — Portland
KFRC — San Francisco
KFBK — Sacramento
KWG — Stockton
KMJ — Fresno
KERN — Bakersfield
KDB — Santa Barbara
KGB — San Diego
10 to 11 a.m. M.S.T.
KLZ — Denver
KSL — Salt Lake City
For further details on Judging and Awarding of Prizes, etc., See Rules on Reverse Side (over)

PICKING A NAME—General Mills is distributing these ballots and entry blanks for the Gold Medal Nomination Sweepstakes.

BRAIN TEASERS AS SALESMEN

WMBD Finds Public and Sponsor Fond of Questions And Answers; Prizes Given Winners

By GOMER BATH
WMBD, Peoria, Ill.

Mr. Bath

UNUSUAL audience interest in two series of announcers' contests led to the development of *Brain Teasers* by WMBD, Peoria, Ill. This half-hour feature, formerly three times a week and now twice weekly, has kept a city audience of 115,000 and the surrounding community talking for nine months. It has been sponsored the entire time by Brooks Apparel Store for Men and Women.

The program is a contest, based on the idea of questioning the ordinary man and woman before the microphone. At the beginning, a few announcements brought the names of a great many who made application to enter the contest. Actual contestants were selected from this list, as nearly as possible in the order of their application, but always to include three men and three women in each half-hour contest.

Each contestant is given a little less than five minutes before the microphone, simply following the directions and answering the questions of the announcer who conducts the contest. At the conclusion of the quiz, the contestant is asked to read a piece of commercial continuity for the advertiser. Contestant has had this continuity for a half hour so that he may study it and do it full justice. The advertising thus done by the contestants is practically all that appears on the program.

Audience Reaction

THE advertiser offers in each contest a $5 merchandise certificate as first prize and a $2.50 certificate as second prize. One dollar merchandise certificates are offered to listeners who submit questions which merit use in the contests.

At the conclusion of the contest the announcer reads the list of questions used and gives the correct answers. She also gives names of winners of the previous contest.

Judges grade contestants 75% on their correctness in answering questions, 10% on promptness and 15% on clearness of voice and good personality. It was found necessary to stress promptness in order to keep the program running at a good tempo.

Reaction of the audience has been seen in several ways. There have always been more than enough persons volunteering to take part in the contests, probably more for the enjoyment of it than for the chance of winning a prize. Any errors broadcast during these periods have always brought a great mail and telephone response. Questions have been submitted in such quantities that building the contest has never been a problem.

The *Brain Teasers* are composed of questions which require quick thinking and a good memory as well as "catch questions". The latter are frequently misunderstood by the audience and it has required the work of three telephone operators for an hour or two to explain after some of the broadcasts. Questions which really test the knowledge of contestants have proved popular.

The *Brain Teasers* have the element of freshness since each contest brings a new set of questions and six new personalities to the microphone. Humorous situations develop spontaneously but the announcer is careful not to embarrass or "make fun of" the contestant. The cost of the program is the cost of prizes. Florence Pearson, member of the WMBD sales staff, originated and conducts successfully the *Brain Teaser* series.

ZENITH RADIO Corp. bid of $410,000 for the property of the bankrupt Grigsby-Grunow Co., Chicago, was accepted June 17 by the referee in bankruptcy on recommendation of creditors and bondholders.

Cleveland Media Organize Agency Recognition Plan

Financial Responsibility and Good Reputation Required

ALL MAJOR Cleveland advertising media have joined together to set up standards for the recognition of advertising agencies in and about Greater Cleveland. This step has been taken to cooperate more fully with established agencies, to protect their interests and investments and to assure the various advertising media of Cleveland that they will no longer be pressed for recognition by so-called chiselers, agencies of little experience or financial standing, and the so-called one-desk, one-man outfits.

Participating in this venture, which is known as the Cleveland Media Group, are the four broadcasting stations, WGAR, WHK, WTAM and WJAY; the three daily newspapers, *The Cleveland Press*, *The Cleveland Plain Dealer* and *The Cleveland News*, The Central Outdoor Adv. Co. and The Stearn Street Car Adv. Co.

Basic Requirements

A SUCCESSION of meetings held during the past three months for the purpose of organization were necessary to outline the requisites for agency recognition. These requisites, in the main, are:

1. That the principles of the agency must be of good reputation, with advertising experience and ability.

2. That the financial statement of the agency must be satisfactory and continuously satisfactory.

3. That the agency assumes full responsibility for payment of all advertising bills.

4. That the agency shall be an independent contractor, without any direct affiliation with any of his clients and with no financial interest in his agency by any of his clients.

A committee representing each of the four media comprises the executive committee of the Media Group. These are John F. Patt of WGAR for radio; F. N. McGehee of *The Cleveland Press* for newspaper, Brown Irish of The Central Outdoor Adv. Co. for outdoor advertising, and Paul Hines of The Stearn Street Car Adv. Co. for car cards. They, however, simply meet to harmonize the collective viewpoints of the four media groups and are in no way empowered to make decisions binding their groups. Each group may act separately, but so far all four media have agreed on which agencies shall be recognized and which agencies shall be denied recognition.

The Cleveland Media Group has executive offices at 1180 Union Trust Bldg. and Jules Eshner of that office is acting as coordinator.

Star Brewery on Four

STAR BREWERY, Vancouver, Wash. (Hop Gold beer) is sponsoring Bobby Grayson, former Stanford All-American football player, in a weekly quarter-hour sports news program on KOIN, Portland; KOL, Seattle; KVI, Tacoma; KFPY, Spokane. The program is keyed from KOIN.

FCC in Half Year Grants 22 Stations

New Broadcasters This Year In the 100-watt Classification

CONSTRUCTION permits to erect 22 new broadcasting stations, all in the 100 watt or daytime category, have been issued by the FCC during the six months from Jan. 1 to July 1, the records reveal. Some of the grants were made without hearings and some upon recommendation of Commission examiners after hearing. All grants were under the FCC's broad authority to license new locals in communities deemed to require such service under the amended radio law—an authority that has been broadened substantially with the repeal in June of the Davis Amendment, eliminating zones and quota.

Following are the stations authorized for construction (these should be added to the 1936 BROADCASTING Year Book listings); U indicates unlimited time, and D daytime:

KBST, Big Spring, Tex. — Big Spring Herald Broadcasting Co., 100 w. U on 1500 kc.

KPLT, Paris, Tex.—North Texas Broadcasting Co., (*Paris News*) 100 w D on 1500 kc.

KRBC, Abilene, Tex. — Reporter Broadcasting Co. (*Abilene Reporter*), 100 w. U on 1420 kc.

KRRV, Sherman, Tex.—Red River Valley Broadcasting Corp. (*Sherman Democrat*), 100 w. D on 1310 kc.

KEUB, Price, Utah—Eastern Utah Broadcasting Co. (Sam G. Weiss), 100 w. U on 1420 kc.

KUTA, Salt Lake City—Utah Broadcasting Co. (C. Carman, David G. Smith and Grant Wrathall), 100 w. U on 1500 kc.

KANS, Wichita, Kan.—Charles C. Theis, 100 w. U on 1210 kc.

KDNC, Lewiston, Mont.—*Democrat-News* Co. Inc.—100 w. U on 1200 kc.

KVCV, Redding, Cal. — Golden Empire Broadcasting Co. (William Schield, Harold Smithson and Sidney R. Lewis), 100 w. U on 1200 kc.

WAYX, Waycross, Ga.—Waycross Broadcasting Co. (E. F. and S. F. Sapp), 100 w. U on 1200 kc.

WFOY, St. Augustine, Fla.—Fountain of Youth Properties Inc., 100 w. U on 1210 kc.

WJNO, West Palm Beach, Fla.—Hazlewood Inc., 100 w. U on 1200 kc.

WGRC, New Albany, Ind. — Northside Broadcasting Corp., 250 w. D on 1370 kc.

WJRD, Tuscaloosa, Ala.—James R. Doss Jr., 100 w. D on 1200 kc.

WLIN, Middleboro, Ky.—Lincoln Memorial University, Harrogate, Tenn., 100 w. U on 1210 kc.

WMIN, St. Paul, Minn. — Edward Hoffman, 100 w. U on 1370 kc.

WNLC, New London, Conn. — Thames Broadcasting Corp., 100 w. D on 1500 kc.

WBLY, Lima, O.—Herbert Lee Blye, 100 w. D on 1210 kc.

WDWS, Champaign, Ill.—*Champaign News-Gazette* Inc. 100 w. D on 1370 kc.

WAPO, Chattanooga, Tenn.—W. A. Patterson, 100 w. D on 1420 kc.

WSPG, Portland, Me. — Portland Broadcasting System Inc. (*Portland Press-Herald*), 500 w to local sunset on 640 kc.

NEW, Valley City, N. D. (call letters unassigned)—George B. Bairey, 100 w. U on 1500 kc. (Granted June 20).

Now King-Trendle Corp.

JOHN H. KUNSKY, vice president of the Kunsky-Trendle Broadcasting Corp., having recently changed his name legally to John H. King, the company's name is now the King-Trendle Broadcasting Corp. King-Trendle operates WXYZ, Detroit; WOOD-WASH, Grand Rapids, and the Michigan Network, as well as various Michigan theaters. H. Allen Campbell is general manager.

Towering above the Mid-South

NOW 5000 WATTS NEW 600 FOOT TOWER

WMC

Radio Station of the Commercial Appeal

Most efficient station in the Mid-South

FIRST CHOICE OF THE NATIONAL ADVERTISER

Portions of the six states covered by this newer, finer service are estimated to have a population of 3,410,499 and a consumer income for the next six months 26% greater than the average for the past three years. Entirely new plant ready for operation about September 1.

WMC - MEMPHIS

"Down in Dixie"

Studio and Executive Offices: Hotel Gayoso

Cover the ENTIRE territory for less than half of the cost of spotting the area on smaller stations.

Through its affiliation with the Commercial Appeal (the South's Greatest Newspaper) WMC has established a reputation for interesting features, news scoops, and balanced entertainment that has built its program preference to more than 4 times as great as its nearest rival.

For high fidelity, uniform dependability, daily publicity and showmanship

WMC GIVES YOU MORE FOR YOUR ADVERTISING DOLLAR

- Increased Coverage
- Outstanding Results
- NBC Outlet
- Popular Local Features

RADIO MARKET MASTER OF THE MID-SOUTH

Wider Mid-South Coverage

E. KATZ,
Special Representative

Studio Programs Available for National Sponsorship

(Based on questionnaire returns from broadcasting stations)

ALABAMA

	TYPE	PREV. SPONS.	TITLE	TIME
Montgomery				
WSFA	Hymns in Rhythm	Yes	Sky Pilots	Eve.
	Radio Highlights	Yes	What's On Your Air	11 a.m., 6 p.m.

ARKANSAS

El Dorado				
KELD	News	Yes	News From Everywhere	7:30 a.m., 6.30 p.m.
	Instr., Singing	Yes	Johnnie Harvey's Cowboys	7:45 a.m., 6 p.m.
Fayetteville				
KUOA	Hillbilly	----	Ozark Mountaineers	5:45 p.m.
	News	----	Views & Reviews	10:30 a.m.
Hot Springs				
KTHS	Hillbilly	Yes	Barn Dance, Var. Show	Thurs. 9:15 p.m.
	Hymns, History	No	Sunday Aft. Hymn Sing	Sun. 5 p.m.
Jonesboro				
KBTM	Bulletins	No	Police News	10:45 a.m.
	Organ, Vocal, Violin	No	Organettes	5:45 p.m.
Little Rock				
KARK	News	No	News Reporter	9 p.m.
	Street	Yes	Man on the Street	12:15 p.m.

CALIFORNIA

Berkeley				
KRE	Baby Welcome	Yes	Your Baby's Birthday	Wed., Sun. 6 p.m.
	Unpublished Songs	Yes	Inspiration Time	Tues. 5:45 p.m.
Long Beach				
KFOX	Comedy	Yes	Al & Molly	6 Weekly
	Comedy, Music	----	School Kids	7 Weekly
Los Angeles				
KEHE	Home Economics	Yes	Hostesses of Air	2 p.m.
	Child	----	Story Man	4:30 p.m.
KFAC	Drama	Yes	Jury's Verdict	7 p.m.
	Drama	No	Tom Brown	5 Weekly
KFWB	Amateur	Yes	Amateur HiJinks	Fri. 7:15 p.m.
	Drama	No	Who	Tues. 8 p.m.
Monterey				
KDON	Local Events	No	Date Book of the Air	1:30 p.m.
	Sports	No	Sport HiLites	12:30 p.m.
Oakland				
KROW	Infor. Interviews	No	Man on Street	5 p.m.
	Mystery Singer	Yes	The Ne'er Do Well	6:45 p.m.
Sacramento				
KFBK	Variety	No	Musical Caravan	Wed. 8-8:30 p.m.
	Girl Blues Singer	No	Rhythm & Romance	Thurs. 7-7:15
San Bernardino				
KFXM	Drama	No	Studio Players	Thurs. 7:30 p.m.
	Hillbillie	No	Apple Jack & Co.	2:30 p.m.
San Francisco				
KGGC	Women's Club	No	Fiesta	At Once
	High School Variety	Yes	Student's Hour	July

COLORADO

Denver				
KFEL-KVOD	News	Yes	News Service	On the Hour
	Piano, Vocal	Yes	Song-a-Day Songfellow	10:45 a. m.
KLZ	Semi-Classical Music	No	Organ-Piano Concert	Fri. 9 p.m.
	Western History Drama	Yes	Nuggets of the Rockies	----------
Greeley				
KFKA	Old Time Harmony	Yes	Lois & Joe	12:15-12:30 p.m.
	Cowgirl Singer	Yes	Esther Gibson	6:15-6:30 p.m.

CONNECTICUT

Bridgeport				
WICC	Oldtime Songs	Yes	Memory Song Man	Tues. 5:45 p.m.
	Ballad, Duets	----	Anne-Marie-Robert	----------
Hartford				
WDRC	Youth	Yes	Young Folks Program	Sat. 9:30 p.m.
	Drama	No	Metropolitan Players	Tues. 10:30 p.m.
New Britain				
WNBC	Script & Song	No	Paris Bros., Bob Jones	Eve
	Instrumental	No	Arcadian Serenaders	Eve
New Haven				
WELI	Child Variety	----	Juvenile With Prof. Ralph	Sat. 11-11:30 a.m.
	Mixed Quartet Ballads		Ballad Singers	Thurs. 7:30 p m

DISTRICT OF COLUMBIA

Washington				
WJSV	Commentator	Yes	Maybelle Jennings	Two Weekly
	Farm	No	Our Senator	6:30 a.m.
WOL	Sports Review	Yes	Today in Sports	6 p.m.
	News	Yes	Transradio	12:15 p.m.

FLORIDA

Jacksonville				
WJAX	Movie Review	Yes	Movie News Reporter	Morn. or Eve.
	Instr., Vocal Trio	Yes	Paul, Mary & Johnny	Morn. or Eve.
Miami				
WQAM	Child	Yes	Kiddie Kabaret	Sat. 10-10:30 a.m.
	Remote	No	Man in Street	M-W-F 12:30 p.m.
St. Petersburg				
WSUN	Solo, Instr.	No	Hazel Slusser	T, T, S., Noon
	Orch.	Yes	Southerners	Thurs. 7:30 p.m.
Tallahassee				
WTAL	Amateur	Yes	Kingston's Radio Amateurs	1 Hour
	Barn Dance	Yes	WTAL Barn Dance	1 Hour
Tampa				
WFLA	Partic	Yes	Kay Dean on Market Sq.	M-W-F 10 & 10:30 a.m.
	Orchestra	Yes	Grank Grasso & Orch.	Fridays

IDAHO

Boise				
KIDO	Novelty	Yes	Circus Sideshow of Air	30 Min.
Idaho Falls				
KID	News	No	KID News O' the Air	9:45 p.m.
	Child	Yes	KID Kiddie Klub	5 p.m.
Twin Falls				
KTFI	Popular Dance	Yes	Ambassadors	Tue.-Sat. 9 p.m.
	Old-time Dance	Yes	Bar M Ranchhands	Fri. 9 p.m.

ILLINOIS

Chicago				
WAAF	Questions	No	Answer Man	3 Weekly Daytime
	Rhythm, Comedy	Partic	Red Hot & Low Down	2-3 p.m. Daily
WCFL	Mundelein Players	No	Adven. of Sally Ann	30 min.
	WPA Players	No	Happened on State St.	15 min.
WENR	Variety	No	Jamboree	Sat. 5:30-6 p.m.
	Organ	No	Jesse Crawford	Sat. 5-5:30 p.m.
WGN	Musical Variety	No	Melodies in Sky	Sun. 9 p.m.
	Musical Concert	No	Attilio Baggiore Orch.	Tues. 9 p.m.
WJJD	Feminine Partic.	----	Woman's Exchange	10:30 a.m.
	Young Men, Women	Yes	High School Hour	Sat. 10 a.m.
WLS	Serial Drama	Yes	Virginia Lee & Sunbeam	11:45 a.m.
	Orch., Quart., Solo	----	Melody Parade	12:15 Noon
WMAQ	Child Drama	No	Flying Time	5-5:15 p.m.
	Women's Drama	No	Dan Harding's Wife	9-9:15 a.m.
East St. Louis				
WTMV	Hourly News	Yes	News	Every Hour
	Variety	Yes	Shut-in Hour	1:30 p.m.
Harrisburg				
WEBQ	Barn Dance	Yes	Hay-Loft Hi-Jinks	Fri. 10-12 p.m.
	Variety	No	Radio Nite-Club	Mon. Wed.10 p.m.
Peoria				
WMBD	Questions	Yes	Brain Teaser	----------
	Peoria News	Yes	The Snooper	----------
Quincy				
WTAD	Music, Variety	Yes	Go Around	4:15 p.m.
	Hillbilly	Yes	Lem & Luther	6:30 p.m.
Rockford				
WROK	Barn Dance	Yes	Rock River Barn Dance	Wed. 9-10 p.m.
	Dramatic	No	Little Theater of Air	Sun. 8:30 p.m.
Tuscola				
WDZ	Feminine	Yes	Their Majesties the Babies	9:45 a.m.
	General	No	WDZ Birthday Party	2 p.m.

INDIANA

Elkhart				
WTRC	Juvenile (adult appeal)	No	Children's Hour	Sat. 10 a.m.
	Communities	Yes	Your Town	Fri. 1 p.m.
Fort Wayne				
WGL	Orchestra, Vocal	No	Bob Shreve Orch.	----------
	Organ, Piano, Violin	Yes	Duke & Duchess	----------
WOWO	Modern Barn Dance	Yes	Hoosier Hop	----------
	Harmony Team	Yes	Sunshine Boys	----------
Terre Haute				
WBOW	Song Team, Script	No	Willobys at Stoney Brook	M,W,F, 10:30 p.m.
	Orch., Harmony	Yes	Rhythmats	M,W,F, 6:30 p.m.

IOWA

Davenport				
WOC	Remote	Yes	Inquiring Microphone	12:15 p.m.
	Script	No	Family Foursome	Any Open Spot
Dubuque				
WKBB	News	No	Noon News	12:15 p.m.
	Play-by-play	No	Chicago Baseball	2-4 p.m.

KANSAS

Abilene				
KFBI	Kiddy Hour	No	Sunbonnet Sue	4:30 p.m
	Musical	Yes	Interstate Trio	7 a.m.
Hutchinson				
KWBG	Popular Music	Yes	Guess the Title	To Suit
	Old Time Dance	Yes	After Supper Gang	To Suit
Kansas City				
WLBF	Sports	Yes	Wrestling Matches	T, T 10 p.m.
	News	Yes	Hourly News	Every Hour
Topeka				
WIBW	Drama	No	Crime Patrol	3 15-min. in one evening

KENTUCKY

Ashland				
WCMI	Vocal, Poems, Organ	Yes	Twilight Reveries	6-6:15 p.m.
	Variety	Yes	Variety Show	8-8:30 p.m.
Louisville				
WHAS	Variety	No	Greetings From Old Kentucky	Wed. 7:30 p.m.
	Dialogue	No	Jackson Family	7:30 a.m.

LOUISIANA

New Orleans				
WWL	Fireside	Yes	Home Folks	8:30 a.m.
	Comedy	No	Harlem Shopping Tour	2 p.m.

MAINE

Augusta				
WRDO	Popular Vocal	Yes	Lilyan Dawne & Songs	Sun. Noon
	Child	Yes	Aunt Pansy's Club	Eve.

(Continued on page 90)

WASHINGTON THREW A DOLLAR

And quite a feat, too, when it spanned the Potomac—but it brought no returns. Today, local and spot advertisers get the most value per dollar when they use the services of WRC or WMAL. They cover not only Washington, but the thriving suburbs of Virginia and Maryland.

WRC
1000-500 WATTS
NBC Red Network

WMAL
500-250 WATTS
NBC Blue Network

WASHINGTON, D. C.

Completely programmed by NBC

Studio Programs Available for National Sponsorship

(Based on questionnaire returns from broadcasting stations)

(Continued from page 88)

MARYLAND

	TYPE	PREV. SPONS.	TITLE	TIME
Baltimore				
WBAL	Drama	No	The O'Days	6:20 p.m.
	Amateur	No	Calling All Stars	Fri. 2:30 p.m.
WCAO	Musical	No	Bolek Musicale	Sun., Wed. p.m.
	Bridge Talk	No	Talks on Contract	Tues. 12:30 p.m.
WFBR	Song, Talk Duo	No	Civic Calendar	9 a.m.
	Ballads	Yes	Phil Crist	To Suit
Cumberland				
WTBO	Hillbilly	Yes	Sleepy Valley	Mon. 7:30 p.m.
	Popular Music	Yes	Rudy Sullivan	Sun. 3:30 p.m.

MASSACHUSETTS

Boston				
WEEI	Variety	No	The Goofs	Sat. Noon
	Old-time Sing	No	The Get-Together	Wed. 7:30 p.m.
WMEX	Variety	Yes	Harper's Varieties	Sun. 11 a.m.
	Sports	Yes	Today's Winners	6:30 p.m.
Yankee Network	Script	No	The Hemingways	3 Weekly 15 min.
	Script	No	Marriage Clinic	Weekly Half-hour
Fall River				
WSAR	French	Yes	Franco-American Hour	Fri. 7 p.m.
	Portuguese	Yes	Azorean Hour	Sun. 6 p.m.

MICHIGAN

Battle Creek				
WELL	Reminiscences	Yes	News Once Was	8:15 p.m.
	Speech	Yes	Lost & Found	7 p.m.
Detroit				
CKLW	Feminine	Yes	Home Beautiful	9:30 a.m.
	Humor, Music	Yes	Happy Joe Frolic	8 a.m.
WJBK	Commentator	Yes	Billy Repaid's News Comment	7:30 p.m.
	Magic	Yes	Chandu	Daily
WJR	Child	Yes	Uncle Neal's Safety Club	4:30 p.m.
	Hillbilly	Yes	Michigan Mountaineers	5 p.m.
WXYZ	Poetry, Music	Yes	Wandering Vagabonds	Any Time
	Novelty Songs	No	Girl Friends	Any Time
Flint				
WFDF	Amateur	Yes	Talent Quest	Tues. 8:30 p.m.
	Movie News	Yes	Hollywood Reporter	5-30 p.m.
Grand Rapids				
WOOD	Hillbilly	Yes	Log Cabin Four	Morn. or Night
	Tenor, Piano, Guitar	Yes	Kroger Presents	Morn. or Night
Ironwood				
WJMS	Music, Poetry	No	Musical Miniatures	Sun. 1 p.m.
	Recordings	No	Birthday Party of the Air	5:15 p.m.
Lansing				
WJIM	Hillbilly	Yes	Zeb Turner's Mountain Men	Night
	Phone Request	Yes	Earle Parchman	Open
Jackson				
WIBM	Hillbilly comedy	Yes	Rhythm Rangers	3¼ hrs. week
	Baritone, Organ	Yes	Lavender & Old Lace	Fri. 10 p.m.
Kalamazoo				
WKZO	Street Interview	Yes	Inquiring Reporter	----------
	Music Question Box	Yes	Eddie Makins	----------

MINNESOTA

Minneapolis				
WCCO	Variety	Yes	Cross-Roads Party	----------
	Male Quartet, Instr.	Yes	Four Horsemen	----------
WTCN	News	Yes	Newsroom	6:45 p.m.
	Trio, Solo, M.C.	No	Amanda Snow's Revue	8:30 p.m.
Rochester				
KROC	Quartet, String Trio	Yes	Musical Mom. in History	9 p.m.

MISSISSIPPI

Jackson				
WJDX	Minstrel	Yes	Sunshine Minstrel	Sat. 7 p.m.
	Choir, Sermon	Yes	Radio Gospel Voice	Sun. 3 p.m.
Kosciusko				
WHEF	Barn Dance	Yes	WHEF Barn Dance	Thurs. Eve.
	Amateur	Yes	Radio Talent Discovery	Sun. 3 p.m.
Laurel				
WAML	Organ	Yes	Organ Melodies	12:15-12:45 p.m.
	Teddy Jones Orch.	No	Danceable Melodies	Sun. 3:30 p.m.

MISSOURI

Columbia				
KFRU	Rural Comedy	Yes	General Store	1 p.m.
	Baseball	Yes	Baseball Games	Thurs., Sun.
Joplin				
WMBH	Music, Prizes	Yes	Mystic Melodies	11:45 a.m.
	Sports Roundup	Yes	Sports Flashes	5:55 p.m.
Kansas City				
WHB	Variety	Yes	WHB Staff Frolic	3 p.m.
	News	Yes	John Cameron Swayze	3 Daily
W9XBY	Old-time Music, Dialogue	No	Chuck Wagon Opera	12 noon
	Cowboy Singer	Yes	Colorado Pete	12:30 p.m.
St. Jospeh				
KFEQ	Hawaiian	No	Dixie's Hawaiians	8:15 a.m.
	Minstrel	No	Minstrel Show	Opt.
St. Louis				
KMOX	Dramatic	No	True Detective Stories	Night
	Music, Narrator	Yes	Dream Avenue	Day
KSD	Dramatic	Yes	Where to Go Tonight	12 noon
	Musical	----	Cameo of Modern Song	9:35 p.m.
WIL	Child Birthday	Yes	Birthday Bells	8 a.m.
	Musical Sports Revue	Yes	Today's Sports	3:30 p.m.

MONTANA

	TYPE	PREV. SPONS.	TITLE	TIME
Great Falls				
KFBB	Genuine Hillbilly	Yes	Breakfast Club	8-8:30 p.m.
Missoula				
KGVO	Amateur	No	KGVO Amateur Hour	Tues., p.m.
	Drama	No	Treasure Trails	Mon. 8 p.m.

NEBRASKA

Grand Forks				
KFJM	Drama Thriller	No	Story Man	11:15 a.m.
	Youth	No	Miles Grina's Birth. Club	5:30 p.m.
Lincoln				
KFAB	Homey Variety	Yes	Neighborville Folks	Sun. 2:30 p.m.
	Kids, Dogs	No	Kennel Klub	4-5 p.m.
Norfolk				
WJAG	Markets, News	----	Partic Radio Family	12:15 p.m.
	Man in Street	No	Voice of Street	10:15 a.m.
Omaha				
KOIL	Tenor, Organ	No	Ken & Eddie	Open
	Variety	Yes	All Aces	Open
WOW	Questions	Yes	Curiosity Club	5-5:15 p.m.
	Novelty Harmony	Yes	Helen & Three Notes	10:30 a.m., 10:15 p.m.

NEW JERSEY

Atlantic City				
WPG	Child Amateur	Yes	WPG Kiddies Revue	Sun. 2 p.m.
	Sketch	No	Home Sweet Home	5 p.m.
Newark				
WNEW	Boys	Yes	Junior G-Men	5:30 p.m.
	Variety	Yes	Alan Courtney's Joymakers	11:30 a.m.
Trenton				
WTNJ	Street	Yes	Public Speaks	Sat. 4:30 p.m.
	Poetry, Organ	Yes	Enchanting Moments	9:15 a.m.

NEW YORK

Buffalo				
WBNY	German Music	No	Little German Band	Sat. 10 p.m.
	Drama	Yes	Nine O'Clock Show	Sun. 9 p.m.
WEBR	Remote	No	Baseball	3-5, 6 & 9:15 p.m.
	Sports resume	No	Sports Highlights, Races	4-5 p.m.
New York				
WOR	Woman's Hour	Yes	Martha Deane	2 p.m., 11:45 a.m. (Sat.)
	Child	Yes	Uncle Don	6 p.m.
WOV	Speaker	No	In Psychologist's Office	9:45 a.m.
	Variety	No	Hans & Harry	10 a.m.
Plattsburg				
WMFF	Oldtime Orch.	No	Mountain Music Makers	Sat. 1 p.m.
	Baseball Play-by-play	No	At the Bleachers	Sun. 3 p.m.
Rochester				
WHAM	Orphanage Talent	No	Children Can Conquer	Late Aft., Sat. a.m.
	Orch., M. C.	No	WHAM & Egg Club	----------
WHEC	Mystery Commentator	Yes	Roch. Merry-go-Round	Fri. 7:30 p.m.
	Audience Singing	No	Let's All Sing	Sat. 8:30 p.m.
Schenectady				
WGY	Male Quartet	Yes	The Upstarters	Open
	Minstrel Show	No	Magnolia & Sunflower Minstrels	Open
Syracuse				
WSYR	Irish Tenor	Yes	Paul O'Tree	Eve.
	Harmony Team	No	Red & Marion	Eve.
Utica				
WIBX	Dramatic	No	Our Neighborhood	T, T, 7:45 p.m.
	General Infor.	Partic	Information	11 a.m.
White Plains				
WFAS	Orchestra	No	Swingtime	Sun. 6:45 p.m.
	Juvenile	Yes	WFAS Junior League	Sat. 4:15 p.m.

NORTH CAROLINA

Charlotte				
WBT	Informal song, talk	Yes	Sing, It's Good for You	----------
	Hymns, Readings	No	Meditation Hour	----------
Greensboro				
WBIG	String Band Contest	Yes	Carolina Jamboree	Sat. Night
	Partic	Yes	Greetings, This is Another Day	6:30-8:30 a.m.
Raleigh				
WPTF	Women	Yes	Woman's Mag. of Air	3 weekly a.m.
	Politics	Yes	Political Promenade	7:30 p.m.
Rocky Mount				
WEED	Hillbilly	No	Sat. Night Jubilee	Sat. night
	Sports	Yes	Sports Revue	6 p.m.
Wilmington				
WMFD	Variety	No	Studio Jamboree	Sat. 6 p.m.
	Homemaking	No	Musical Kitchen	10 a.m.

NORTH DAKOTA

Bismarck				
KFYR	German Band	Yes	Prof. Sauerkraut Band	Noon
	Radio Stars Info.	No	Studio Reporter	10:30 a.m.
Fargo				
WDAY	Poetry, Organ	No	Memory Lane	9:30 a.m.
	Barn Dance	Yes	WDAY Barn Dance	Sat. 8:30 p.m.
Minot				
KLPM	Poems, Organ	----	Musical Scrapbook	6:45 p.m.
	Foreign Lang.	Yes	Norse Hour	Wed. 6:30 p.m.

OHIO

Akron				
WJW	Loan, Borrow, Give	No	WJW Trading Post	11:45 a.m.
	Music, Poetry	No	When Day Is Done	10 p.m.
Cincinnati				
WCPO	Interviews	Yes	Man on the Street	On Req.
	Legal	No	Unusual Lawsuits	On Req.

(Continued on page 92)

NATIONAL ASSOCIATION OF BROADCASTERS' CONVENTION AT THE STEVENS • JULY 6-7-8

THE STEVENS WELCOMES THE NATIONAL ASSOCIATION OF BROADCASTERS to its delightful air-conditioned convention quarters—air-conditioned meeting rooms and Grand Ballroom, dining rooms, lounges and lobby. Its private rooms—all outside rooms—swept by cool Lake Michigan breezes, offer perfect rest, day and night. On Michigan Boulevard at Grant Park, The Stevens is in the center of downtown Chicago. A friendly management and staff welcomes you during the convention and at all times.

Added Features That Make Your Stevens Visit Long-Remembered

- All outside rooms, each with running ice water
- Floor clerk on each floor
- Inspiring roof promenade and view of 3 states
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HOME OF THE CONTINENTAL ROOM

Chicago's Most Intimate Dinner and Supper Dancing Room

Overnight parking, 50c — garage with pickup and delivery, 75c.

THE STEVENS

CHICAGO

WORLD'S LARGEST HOTEL

Studio Programs Available for National Sponsorship

(Based on questionnaire returns from broadcasting stations)

(Continued from page 90)

OHIO—(Continued)

	TYPE	PREV. SPONS.	TITLE	TIME
WKRC	Boy, Girl Songs	Yes	Upstairs	1 p.m.
	Scores, Sports Gossip	Yes	Dick Bray	6:15 p.m.
WLW	Dramatic	No	Waterfront Wayside	On Req.
	Music, Drama	No	Darktown Meetin'	On Req.
Cleveland				
WGAR	Advice to Unhappy	Yes	Guide to Happiness	Open
	Hillbilly	Yes	Hickreenuts	Open
WHK	Musical	No	Reflections	Eve.
	Variety	No	The Curtain Rises	Eve.
WJAY	News	Yes	Here-There-Everywhere	5 Daily
	Drama	Yes	Your Neighbors	2:15 p.m.
WTAM	Hillbilly	Yes	Pie Plant Pete	5 p.m.
	Novelty Orch.	----	Stubby Gordon's Novelette	T. W. T, p.m.
Columbus				
WBNS	Novelty	No	Early Birds	8 a.m.
	Homemakers	Yes	Homemakers Club	1:30 p.m.
WCOL	Man in Street	Yes	Inq. Reporter	12:15 p.m.
	Local news	No	WCOL Police Reporter	7:15 p.m.
WHKC	Organ Reader	----	The Word Man	----------
	Trio, Script	----	Barber Shop Meloders	----------
Dayton				
WHIO	Sports	Yes	News & Views	6:30 p.m.
	News	Yes	News	8, 12 a.m., 6:45, 10 p.m.
Portsmouth				
WPAY	Barn Dance	No	Musical Farm Hands	Sat. Nt., Weekdays
	Street Interview	Yes	Man on Square	12:30-12:45 p.m.

OKLAHOMA

Ada				
KADA	Auto Remote Interv.	Yes	Highway Pickups	Day
	Variety	Yes	Kadadid Frolic	Late aft., eve.
Ardmore				
KVSO	Drama	No	KVSO Theatre of Air	Sun. 3:30 p.m.
	Child Amateur	No	Kiddie Parade	Sat. 8:30 a.m.
Shawnee				
KGFF	Art Haines Band	Yes	String Band	1:30-2 p.m.
	Dixie Mountaineers	No	String Band	5:30-6 p.m.
Tulsa				
KTUL	Dialogue	Yes	Agnes & Al	9 a.m.
	Talking	Yes	Lost & Found	6:15 p.m.
KVOO	Life in Ozarks	Yes	Bill & Mary	1:45-2 p.m.

OREGON

Marshfield				
KOOS	Amateur	Yes	Chet's Show	Open
	Hillbilly (audience makeup)	Yes	KOOS Ramblers	Open
Portland				
KEX	Dramatized News	No	Oregonian on Review	Sat. 7 p.m.
	Community Sing	Yes	Everybody Sing	Wed. 8:45 p.m.
KOIN	Hawaiian	To Net.	Isle of Dreams	Open
	Child Educ.	Yes	Save a Life Club	Late Aft.
Roseburg				
KRNR	Comedy Drama	No	Station Master	6:15 p.m.
	Health	No	Ounce of Prevention	4:45 p.m.

PENNSYLVANIA

Erie				
WLEU	Transcribed	No	Club Gorgeous	9:30 p.m.
	Voice, Music	Yes	Old Philosopher	9:15 a.m.
Johnstown				
WJAC	Hymns	Yes	Little Village Choir	Wed. 7:15 p.m.
	Music	Yes	Druckenmiller Trio	Thurs. 6:45 p.m.
Philadelphia				
WCAU	Daily Hymns	No	Singing Parson	On Req.
	Revue	No	Savitt Serenade	On Req.
WIP	Minstrel	No	Rupert George's Minstrels	Thurs. 11:30 a.m.
	Romantic Variety	No	Aperitif	Thurs. 5:15 p.m.
WTEL	Ringside Descrip.	Yes	Wrestling Bouts	Thurs. 10 p.m.
	Organ, Poetry	Yes	Console Rises	8 a.m.
Pittsburgh				
KQV	Rhythm, Song	Yes	Well-dressed Man	Aft.
	Hillbilly	Yes	Crazy Hillbillies	Early a.m.
WJAS	Variety	Yes	Smooth Sailing	Sun. 4:45 p.m.
	Gossip	Yes	Pittsburgh Backstage	Thurs. 7:15 p.m.

RHODE ISLAND

Providence				
WPRO	Sports	Yes	Joe Fay's Sports Slants	Early Eve.
	Juvenile Revue	Yes	Buddy's Gang	Open

SOUTH CAROLINA

Charleston				
WCSC	Women's Feature	Yes	Do You Know?	M-W-F 10:45 a.m.
	Musical	Yes	Sundown Revue	Sundays 6:30 p.m.
Columbia				
WIS	Negro	No	Rev. Downs & Choir	Wed. 7:15 p.m.
	Sports	No	Sports With Abie Fennell	6:15 p.m.
Greenville				
WFBC	Hillbilly	----	Lee Boswell	Early a.m.
	Reenacted News	----	S. Car. March of Time	Sun. 6 p.m.
Spartanburg				
WSPA	Organ	----	All Request Organ Concert	2:30 p.m.
	Music Greeting Club	----	Something for All	6:30 a.m.

SOUTH DAKOTA

Sioux Falls				
KSOO	Popular Dance	No	Hits in Review	Sun., Thurs., p.m.
	Comedy, Piano Duo	Yes	Skyride	3:45 p.m.
Yankton				
WNAX	String Trio	Yes	Nancy Gurney Trio	3:15 p.m.
	Comedy	No	Old Village School	2:30 p.m.

TENNESSEE

	TYPE	PREV. SPONS.	TITLE	TIME
Bristol				
WOPI	Hillbilly	Yes	Sat. Aft. Matinee	2:15-4 p.m.
	Popular	Yes	Jerry & Blue Chasers	8:45-9:15 p.m.
Knoxville				
WNOX	Hillbilly	No	WNOX Carnival	8 p.m.
	Local Society	No	Club Calendar	9:45 a.m.
WROL	Hillbilly	No	Orig. Crazy Tennesseans	11:45 a.m.
	Poetry, Organ	No	Aft. Meditations	1-1:15 p.m.
Memphis				
WHBQ	Vocal	Yes	Voice of Romance	----------
	Sports	Yes	Wrestling Matches	----------

TEXAS

Amarillo				
KGHC	Sports	Yes	Sports Broadcast	After Aug. 15
	Hillbilly	Yes	Barn Dance	After July 15
Dallas				
WFAA	Oldtime Music	No	Good Old Singers	Fri. 8:30 p.m.
	Cowboy Songs	No	Singing Cowboy	8 a.m.
Fort Worth				
KFJZ	News	Yes	Short Wave Flashes	To Suit
	Sports	Yes	Sport Slants	Eve.
WBAP	Dramatic	No	Helen's Home	9:45 a.m.
	Dramatic	No	Dream Dramas	Thurs. 9:45 p.m.
Lubbock				
KFYO	Drama	Yes	KFYO Playhouse	Eve.
	Music	Yes	Girls Novelty Trio	P.M.
Midland				
KRLH	Variety Orch.	Yes	Dude Vance & Gang	12:30 or 7:15 p.m.
	Novelty Duet	Yes	Sunrise Boys	7-7:30 a.m.
Pecos				
KIUN	Barn Dance	No	KIUN Barn Dance	Hour Weekly
	Vocal Duet	Yes	Mountaineers	¼ Hr. Daily
San Antonio				
KABC	News	Yes	Newscasts	At Once
	Sports	Yes	Sports of the Day	July 1
KMAC	Variety	Yes	Speedblenders	7:30 p.m.
WOAI	News	Yes	Newscasts	7:45 a.m., 5-45, 10 p.m.
	Woman's	Yes	Home Folks	Tues. 9:15 a.m.
Waco				
WACO	Child	Yes	Little Broadcasters	5 p.m.
	Organ, Violin	----	Sunshine & Shadows	10:30 a.m.

UTAH

Salt Lake City				
KDYL	Child Talent	Yes	Kangaroo Club	4-30:4:45 p.m.
	Inquiring Reporter	Yes	KDYL Inq. Reporter	T-S 1:15-1:30 p.m.

VERMONT

St. Albans				
WQDM	Musical	Yes	Request Program	Wed. 11:15 a.m.
	Dramatic	Yes	Memory Program	Wed. 12:30 p.m.
Waterbury				
WDEV	Blues Singer	Yes	Lila Culver	p.m.
	Mount. Singing	No	Arkansas Cowboys	p.m.

VIRGINIA

Charlottesville				
WCHV	Records, Chatter	Yes	Willy Williams & Clara	8:30 a.m.
	Eleanor Whitney	Yes	Ideal Home	Open
Newport News				
WGH	Scotch	No	Scotch Minstrel	7:30 p.m.
	Spanish Pop. Songs	No	Latin-Amer. Serenade	Sun. p.m.
Roanoke				
WDBJ	Musical	Yes	After Dinner Variety	Tues. 7 p.m.
	Vocal	Yes	Harmony Girls, Tenor	Mon. 9:15 p.m.

WASHINGTON

Seattle				
KIRO	News	No	Today's News, Tomorrow's History	7:15 p.m.
KJR	News	Yes	Totem News Reporter	3 Daily
	Household	Yes	Home-Maker	10:15 a.m.
KOMO	Hillbilly	No	Cowboy Joe & Mountaineers	10:15 a.m.
	Orch., Vocal	Yes	Waltz Dreams	Tues., Sat. 9 p.m.
Spokane				
KFPY	Hillbilly	No	Hillbilly Hijinks	Mon. 8:30 p.m.
	Sentimental Music	No	Street of Dreams	9:45 p.m.
Tacoma				
KVI	Market News	Yes	Sunrise Club	6 a.m.
	Organ, Guessing	Yes	Mystic Melodies	Partic.
Walla Walla				
KUJ	News	No	News	8 ¼ Hr. Daily
	Studio Ensemble	Yes	Memories	12:30 p.m.
Yakima				
KIT	Partic.	Yes	Old Maestro	Spots
	Hillbilly	Yes	Yakima Sage Riders	15 min.

WEST VIRGINIA

Fairmont				
WMMN	News	Yes	Transradio	6 p.m.
	Sports	No	Baseball Scores	6:30 p.m.

WISCONSIN

Milwaukee				
WTMJ	German Comedy Orch.	Yes	Heinie & Grenadiers	11:30 a.m., 9:30 p.m.
	Women's Commentator	Yes	What's New in Milwaukee	10:15 a.m.
Racine				
WRJN	Man in Street	No	Opinions of Passerby	Sat.
	Street Singer	No	Romero & His Songs	Fri.

U. S. POSSESSIONS

Honolulu, Hawaii				
KGMB	Historic Drama	----	Winning of West	8:30 p.m.
	Review	Yes	Open House	Eve.

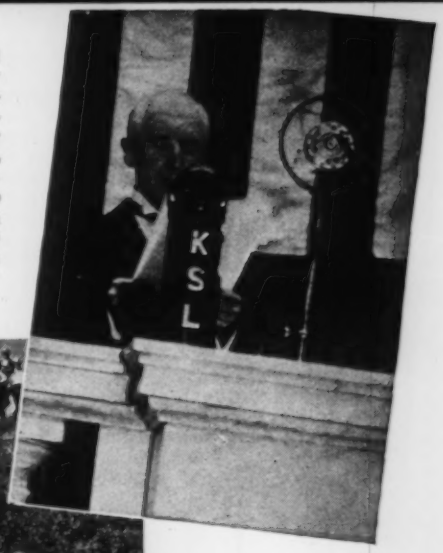
When Western Leaders Want CO-OPERATION & COVERAGE . . . . . They Come to - KSL

AFFILIATED WITH CBS

THE VOICE OF THE WEST

Above—Sir Malcolm Campbell drives 301 miles per hour on the Bonneville Salt Flats . . . KSL is there.

Western business and community leaders know that KSL leads in coverage, popularity and prestige, so it is no wonder that they come to KSL first when there's an advertising or news job to be done. Another reason why this great 50,000 watt station is truly "The Voice of the West."



Above—Governor Blood Addresses the People of Utah . . . KSL is there.

Left—The Utah Open Golf Champion gets in trouble . . . KSL is there.

Below—Salt Lake City goes on parade . . . KSL is there.

Above — The U. S. Army christens a new war bird . . . KSL is there!

FIRST IN SALT LAKE CITY & WESTERN AMERICA

NATIONALLY REPRESENTED BY EDWARD PETRY & CO.

XUM

Passing the Radio Buck

By Station Break

AN IDEALIST will define democracy as a government of the people, for the people and by the people . . . a pessimist wonder whether it is a government at all.

* * *

DEMOCRACY is principally a government of kicks, says the skeptic . . . where everybody sits quietly by, reaping benefits, until his pet privilege is interfered with . . . when he cries to high heaven about his rights as a citizen.

* * *

WE SELDOM think of civic matters until they become personal matters. To paraphrase that sterling broadcaster, William Hard . . . even the great political parties hibernate between conventions, and then, in a few brief, hysterical, fatigue-drunk days, select the leaders and policies by which they hope the nation will be run.

* * *

A TRADE association, such as the NAB, is a *business democracy* . . . with all of the failings of democracy in the large.

* * *

ITS FAILINGS? Last year at Colorado Springs, copyright was allowed completely to usurp the interests of an industry, which, in addition to this admittedly pressing problem, had many other important matters which *should* have received its most careful attention. *But democracy never acts until its personal interest is threatened.* It never looks ahead.

* * *

AND WHEN copyright was discussed . . . it was debated in an atmosphere of frenzied personalities which completely clouded the real economic and legal issues involved . . . issues concerning which few indeed seemed to have done any constructive thinking prior to attending the convention.

* * *

WHILE this was occurring, the membership listened with scant attention to the proposal for the creation of an agency recognition system by the broadcasting industry . . . a system which would protect the efficiency and integrity of the agency, upon which radio depends so greatly . . . and which would have put the broadcasters on a par with other major advertising media.

* * *

THIS SCANT attention was later turned into no action, when the system, cursorily adopted, failed of establishment by lack of station interest and cooperation.

SIMILAR attention was given to the creation of a cooperative bureau of radio research . . . which the NAB, ANA, and 4-A's are now attempting to bring into being . . . a project which will give radio a general counterpart to the ABC in the publication field, which will furnish sorely needed fundamental information regarding broadcasting, save stations and networks hundreds of thousands of dollars annually in defensive competitive research necessitated by the extreme claims of someone else, and which will inspire a new and greater confidence in the medium as a whole . . . in other words a project of major importance.

* * *

THERE was a report which mentioned the standard accounting system developed during the year of 1935 . . . but to date a mere handful, STATION BREAK is informed, have adopted this system or even shown much interest in it.

* * *

FROM what he has seen, STATION BREAK is utterly at loss to know how the average radio station has any idea of its specific costs of operation or therefore, of its operating efficiency.

* * *

TYPICAL failings of a democracy. Some day there may be a governmental requirement of standard accounting . . . following which all stations will scramble . . . completely in a dither . . . to have a system satisfactory to them adopted. How much easier would it be . . . to apply a sound system in advance of such a contingency . . . and to prove the desirability of its continuance by the soundness and comprehensiveness of the data which it reveals.

* * *

PARDON our jaundiced vein. Believe it or not . . . broadcasters are little worse than other business men. But we *do* have a message . . . (You must *always* have a message when you sound the trumpet of reform so loudly). Our message is this:

* * *

LESS than a week from now the broadcasting industry will have another convention. Some of these matters will come up again, while some are dead beyond revival. Certainly there will be more problems than copyright to be considered. Now a democracy succeeds to the extent to which it is based upon an intelligent, *informed* public opinion. *The business democracy of the NAB will be successful to the extent to which the broadcasters have familiarized themselves with the problems of the industry sufficiently to act intelligently regarding them.*

FLASH! WFBR broadcasts more local live talent shows sponsored by national advertisers than any other Baltimore station! We have several shows on tap with a built-up audience ready to boost YOUR product in Baltimore...Write WFBR for details.

Representatives: Edward Petry & Co.

NEW YORK • CHICAGO • DETROIT • SAN FRANCISCO

WMT Gets Power Boost

WMT, Cedar Rapids, Ia., on June 20 was authorized by the FCC to increase its day power from 2,500 to 5,000 watts, upon reconsideration of an application which previously had been designated for hearing. It operates on the 600 kc. channel and will retain its 1,000 watt night power.

Negotiations With WOV For Transfer to Paulists Fail After Many Months

ALL NEGOTIATIONS for the sale of WOV, New York, for $300,000 to WLWL, Paulist Father station in New York, as a means of acquiring full-time operation for the latter station, are off after several months of effort to complete the transaction, it was stated in authoritative quarters June 22.

In addition to these two stations, CBS was also interested in the transaction, since it had pending a proposition whereby it would have leased WLWL as a full-time station and operated it in New York. The negotiations, it is reported, have been rather heated and have had repercussions at the FCC and in certain Congressional circles.

John Iraci, owner of WOV, a limited time station operating on 1130 kc., with 1,000 watts, had offered to make arrangements with WLWL as a part of the transaction whereby he would have leased the station under terms similar to those advanced by CBS. This offer, however, did not receive acceptance and all offers were off. Among other things, certain programs broadcast over WOV were attacked by the Paulists, and Rep. Connery (D-Mass.) on June 18 attacked the FCC for its failure to act on this and other complaints, although he did not mention WOV by name. [For details of plan whereby WLWL would have acquired the facilities of WOV and become a full-time station see BROADCASTING June 15.]

Webster-Eisenlohr Uses Two More on Inter-City

SPONSORED by Webster-Eisenlohr Inc., New York (Girard and Henrietta cigars), the *Today's Winner* show carried on a hookup of WMCA, New York, and WPRO, Providence, on June 22 was extended to two other stations of the Inter-City Group—WIP, Philadelphia, and WCBM, Baltimore. The feature is a 15-minute racing result program six nights weekly.

WMCA also announces the signing of Dentists Supply Co., New York, for 26 weeks starting Sept. 22 for *The Dentist Says*, 15 minutes on Tuesdays and Thursdays, featuring Dr. George Wood Clapp and piped from WMCA to WIP and WMEX, Boston. The account was placed through A-W Adv. Agency, New York. General Foods Co., New York, through Advertisers Broadcasting Co., New York, on Sept. 17 will start *The Folk Singer* over WMCA, for Diamond Crystal Salt, Mondays, 9:30-9:45 p. m.

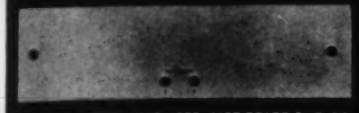
NBC Awards Deferred

NBC Music Guild Awards for new and original chamber music by American composers will be made early in the autumn, according to Frank Black, NBC music director and chairman of the award committee. Of more than 600 manuscripts submitted, 287 met requirements and the committee will continue to study them during the summer. Awards will be $1,000, $750 and $500.

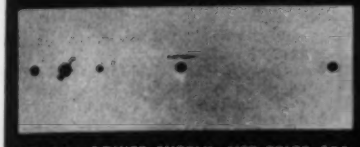
Techna Announces

SEE OUR DISPLAY NAB CONVENTION

A NEW DEVELOPMENT IN BROADCASTING EQUIPMENT

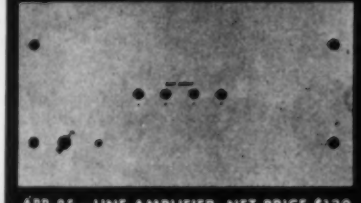


AR-83 — PRE-AMPLIFER, NET PRICE $67.50

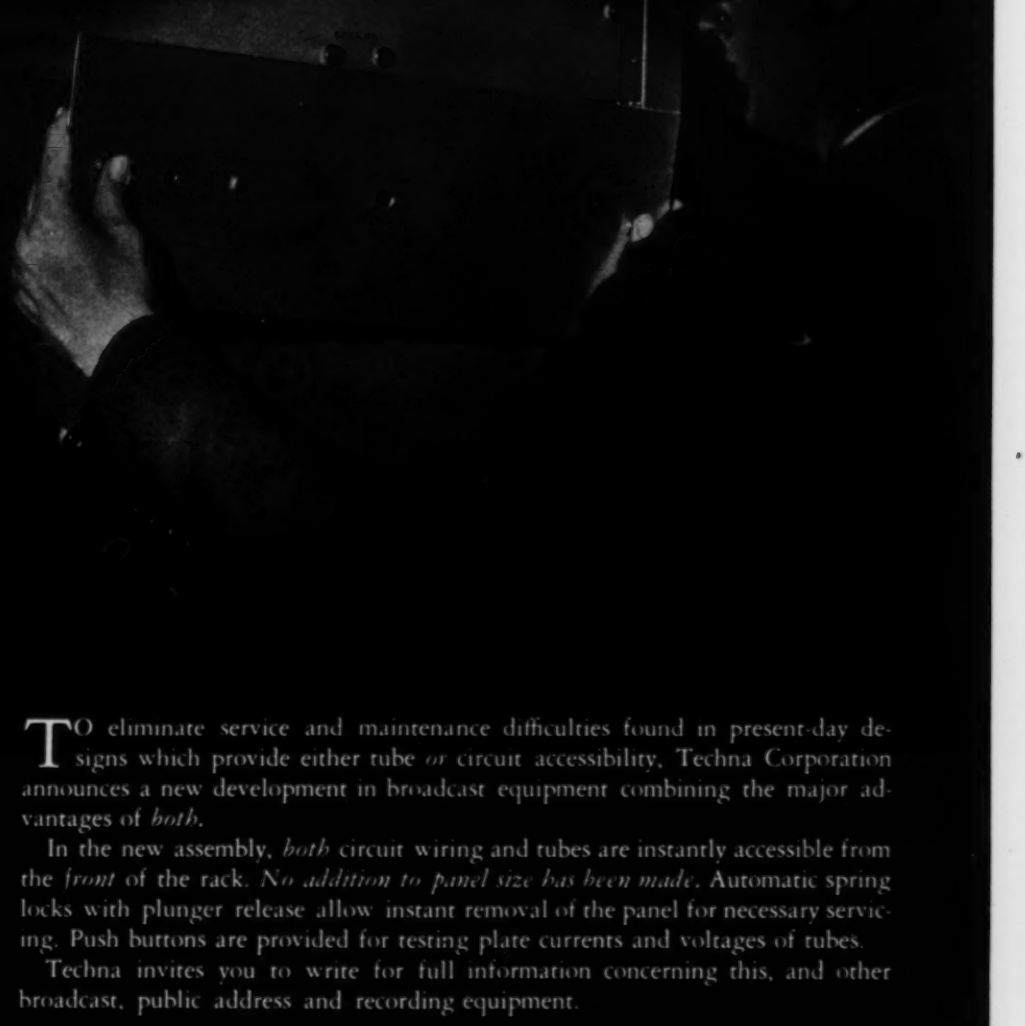


PR-84 — POWER SUPPLY, NET PRICE $58

R-86 — METER PANEL, NET PRICE $47.50



APR-85 — LINE AMPLIFIER, NET PRICE $130



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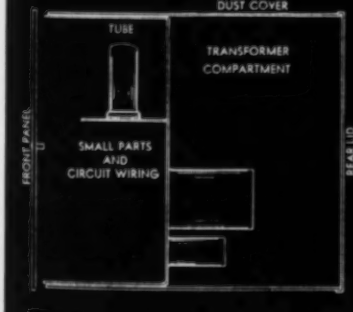


TO eliminate service and maintenance difficulties found in present-day designs which provide either tube *or* circuit accessibility, Techna Corporation announces a new development in broadcast equipment combining the major advantages of *both*.

In the new assembly, *both* circuit wiring and tubes are instantly accessible from the *front* of the rack. *No addition to panel size has been made*. Automatic spring locks with plunger release allow instant removal of the panel for necessary servicing. Push buttons are provided for testing plate currents and voltages of tubes.

Techna invites you to write for full information concerning this, and other broadcast, public address and recording equipment.

TECHNA CORPORATION

926 HOWARD STREET · SAN FRANCISCO

CABLE ADDRESS "TECHNA" BELL TELETYPE: "SF 329"

FULLY EQUIPPED BRANCH OFFICES NOW BEING ESTABLISHED IN CHICAGO AND NEW YORK

The Business of Broadcasting

Current News About Accounts, Pending Schedules, Transcriptions, Representatives and Apparatus; Notes from the Stations

STATION ACCOUNTS

sp—studio programs
t—transcriptions
sa—spot announcements
ta—transcription announcements

WFAA, Dallas

McAleer Mfg. Co., Detroit (auto polish), 26 *sa*, thru Holden, Graham & Clark Inc., Detroit.
Packer Mfg. Co., New York (Scalptone), 26 *ta*, thru Blackman Adv. Inc., N. Y.
Campbell Cereal Co., Northfield, Minn. (Malt-O-Meal), 44 *sp*, thru Mitchell-Faust Adv. Co., Chicago.
Funk & Wagnalls Co., New York (Literary Digest), 3 *sa*, thru Austin & Rossiter Co., N. Y.
Magnolia Seed Co., Dallas (Chigger Chaser), 19 *sa*, thru Dicklow Adv. Agency, Dallas.
General Mills Inc., Minneapolis, 65 *t*, thru Blackett - Sample - Hummert Inc., Chicago.
Procter & Gamble Co., Cincinnati (Drene), 14 *t*, thru H. W. Kastor & Sons Adv. Co. Inc., Chicago.
Reliance Mfg. Co., Chicago (Big Yank shirts), 13 *sp*, thru Mitchell-Faust Adv. Co., Chicago.
Zenith Radio Corp., Chicago, 36 *t*, thru H. W. Kastor & Sons Adv. Co. Inc., Chicago.
General Mills Inc., Minneapolis, 195 *sp*, thru Blackett-Sample-Hummert Inc., Chicago (starts Aug. 31).
Chamberlain Laboratories Inc., Des Moines (hand lotion), 182 *ta*, thru Coolidge Adv. Co., Des Moines (starts Oct. 1).
J. A. Folger & Co., Kansas City (coffee), 150 *t*, thru Blackett-Sample-Hummert Inc., Chicago (starts Oct 12).
Beaumont Laboratories, St. Louis (4-way tablets), 100 *ta*, thru H. W. Kastor & Sons Adv. Co. Inc., Chicago (starts Oct. 19).
McKesson & Robbins Inc., Bridgeport (Pursang), 26 *ta*, thru H. W. Kastor & Sons Adv. Co. Inc., Chicago.

WFAS, White Plains, N. Y.

McKesson & Robbins Inc., Bridgeport (Pursang), 5 weekly *ta*, thru H. W. Kastor & Sons Adv. Co. Inc., Chicago.
Carter Medicine Co., New York (liver pills), 3 weekly *ta*, thru Street & Finney Inc., N. Y.
Adjustable Shoe Co., New York, 3 weekly *sa*, thru Morton Freund Adv. Co., N. Y.

WGN, Chicago

Cal-Aspirin Corp., Chicago (aspirin), 108 *sp*, thru Reincke-Ellis-Youngreen & Finn Inc., Chicago.
Armin Varady Inc., Chicago (cosmetics), 26 *sp*, thru Sellers Service Inc., Chicago.
Golf Ball Inc., Milwaukee (golf balls), 26 *sp*, thru Auspitz & Lee, Chicago.

WABC, New York

Lever Bros. Co., Cambridge, Mass. (Spry), 5 weekly *sp*, thru Ruthrauff & Ryan Inc., N. Y.
Pompeian Co., Bloomfield, N. J. (cosmetics), weekly *sp*, thru Topping & Lloyd Inc., N. Y.

KMJ, Fresno, Cal.

Pacific Greyhound Lines Inc., San Francisco (transportation) weekly *t*, thru Beaumont & Hohman Inc., San Francisco.

WJAS, Pittsburgh

Griffin Mfg. Co., Brooklyn (shoe polish), 4 daily *sa*, thru Bermingham, Castleman & Pierce Inc., N. Y.

WEEI, Boston

General Baking Co., New York (Bond Bread), 5 weekly *t*, thru Batten, Barton, Durstine & Osborn Inc., N. Y.
Lever Bros. Co., Cambridge (Spry), 6 weekly *sa*, thru Ruthrauff & Ryan Inc., N. Y.
Whittemore Bros. Corp., Cambridge (shoe polish), 3 weekly *sa*, thru N. W. Ayer & Son Inc., N. Y.
McAleer Mfg. Co., Detroit (auto polish), 3 weekly *sa*, thru Holden, Graham & Clark Inc., Detroit.
Lever Bros. Co., Cambridge (Lifebuoy soap), 5 weekly *t*, thru Ruthrauff & Ryan Inc., N. Y.
Griffin Mfg. Co., Brooklyn (shoe polish), 24 weekly *sa*, thru Bermingham, Castleman & Pierce Inc., N. Y.
American Oil Co., Baltimore, 6 weekly *ta*, thru Joseph Katz Co., Baltimore.

WHB, Kansas City

Grayson Co., New York (women's apparel), weekly *t*, thru Simon & Gwynn Inc., Memphis.
Cardinal Laboratories Inc., Chicago (Rite-Way shoe cleaner), 8 *sa*, thru Blackett - Sample - Hummert Inc., Chicago.
Westinghouse Elec. & Mfg. Co., St. Louis (electric fans), 52 *sa*, thru Fuller & Smith & Ross Inc., St. Louis.

KDKA, Pittsburgh

Gold Dust Corp., New York (Shinola), 60 *ta*, thru Batten, Barton, Durstine & Osborn Inc., N. Y.
Graef-Cowen Corp., Allentown, Pa. (Aeroxon fly ribbon), 9 *sa*, thru John L. Butler Co., Philadelphia.
Procter & Gamble Co., Cincinnati, 90 *ta*, thru Blackman Adv. Inc., N. Y.

KNX, Hollywood

Gold Dust Corp., New York (Shinola), 5 weekly *ta*, thru Batten, Barton, Durstine & Osborn Inc., N. Y.
Bulova Watch Co., New York, 3 daily *sa*, thru Biow Co. Inc., N. Y.
Standard Oil Co. of Cal., San Francisco, 3 daily *sa*, thru McCann-Erickson Inc., San Francisco.
Nu-Enamel Pacific Co., Los Angeles (paint), daily *sa*, thru Paul Winans Radio Adv. Co., Los Angeles.
Ironized Yeast Co., Atlanta, 2 weekly *sa*, thru Ruthrauff & Ryan Inc., N. Y.
Sears Roebuck & Co., Los Angeles (retailer), 2 *sa*, thru Dana Jones Co., Los Angeles.

WICC, Bridgeport

Lever Bros. Co., Cambridge, (Lifebuoy), 39 *t*, thru Ruthrauff & Ryan Inc., N. Y.
Ironized Yeast Co., Atlanta (proprietary), 9 *t*, thru Ruthrauff & Ryan Inc., N. Y.
Gulf Products Co., Pittsburgh (oil, gasoline), weekly *sa*, thru Young & Rubicam Inc.. N. Y.

KSFO, San Francisco

Pinex Co., Fort Wayne, Ind. (cold remedy), 15 weekly *sa*, thru Sellers Service, Chicago.
Standard Oil Co. of California (gas & oils), 7 weekly *sa*, thru McCann-Erickson Inc., San Francisco.
Star Outfitting Co., San Francisco (clothing), 7 weekly *t*, thru Allied Adv. Agencies, Los Angeles.

KFOX, Long Beach, Cal.

KAY JEWELRY Co., Long Beach, Cal. (jewelry), weekly *sp*, thru Sidney Garfinkel Adv. Agency, San Francisco.

KGO, San Francisco

Reliance Mfg. Co., Chicago (work clothes), 7 weekly *sa*, thru Mitchell-Faust Adv. Co., Chicago.
Pacific Greyhound Lines Inc., San Francisco (transportation), weekly *sp*, thru Beaumont & Hohman Inc., San Francisco.
Bulova Watch Co., New York (watches), 14 weekly sa, thru The Biow Co., N. Y.
Packer Mfg. Co., New York (Scalptone), 2 weekly *ta*, thru Blackman Adv. Inc., N. Y.
C. H. McAleer Co., Detroit (auto polish), 2 weekly *sa*, thru Holden, Graham & Clark Inc., Detroit.
Saylor's Chocolates Inc., Alameda, Cal. (candy), 2 weekly *sp*, thru Doremus & Co., San Francisco.
Hirsch & Kaye, San Francisco (opticians & photo supplies), weekly *t*, thru Harry S. Goodman, N. Y.

WTMJ, Milwaukee

Webster - Eisenlohr Inc., New York (Tom Moore cigars), daily *sp*, thru N. W. Ayer & Son Inc., N. Y.
Lever Bros. Co., Cambridge (Lifebuoy), 5 weekly *t*, thru Ruthrauff & Ryan Inc., N. Y.
General Mills Inc., Minneapolis, 4 weekly *t*, thru Blackett - Sample-Hummert Inc., Chicago.
Hurley Machine Co., Chicago (Thor ironer), 3 weekly *ta*, thru H. W. Kastor & Sons Adv. Co. Inc., Chicago.
Chrysler Corp., Detroit (autos), 16 weekly *sa*, thru J. Stirling Getchell Inc., N. Y.
Griffin Mfg. Co., Brooklyn (shoe polish), 18 weekly *sa*, thru Bermingham, Castleman & Pierce Inc., N. Y.
Mission Dry Corp., Los Angeles (orange beverage), 6 weekly *sa*, thru McCarty Co., Los Angeles.

WNAC, Boston

Ironized Yeast Co., Atlanta (proprietary), 9 *t*, thru Ruthrauff & Ryan Inc., N. Y.
Gulf Refining Co., Pittsburgh (gasoline, oil), weekly *sa*, thru Young & Rubicam Inc., N. Y.
Gillette Safety Razor Co., Boston, 153 *sa*, thru Ruthrauff & Ryan Inc., N. Y.
Lever Bros. Co., Cambridge (Lifebuoy), 3 weekly *t*, thru Ruthrauff & Ryan Inc., N. Y.
May Oil Burner Corp., Baltimore, 58 *sa*, thru Joseph Katz Co., Baltimore.

WHIO, Dayton

Lever Bros. Co., Cambridge (Lifebuoy), 5 weekly *t*, thru Ruthrauff & Ryan Inc., N. Y.
Lykolene Co., Kansas City (toothpaste), 2 daily *sa*, thru H. W. Kastor & Sons Adv. Co. Inc., Chicago.
Ironized Yeast Co., Atlanta (proprietary), 2 weekly *t*, thru Ruthrauff & Ryan Inc., N. Y.
General Mills Inc., Minneapolis (Wheaties), 125 *sa*, thru Knox Reeves Adv. Inc., Minneapolis.

WKRC, Cincinnati

Jel-Sert Co., Chicago (Flavor-Ade), 3 weekly *sp*, thru Rogers & Smith Adv. Agency, Chicago.
U. S. Tire Co., New York, 13 *sa*, thru Campbell-Ewald Co. of N. Y.

WLS, Chicago

Griffin Mfg. Co., Brooklyn (All White Shoe Cleaner), 312 *sa*, thru Bermingham, Castleman & Pierce Inc., N. Y.

CKNX, Wingham, Ont.

Dr. Chase Medicines, Oakville, Ont. (proprietary), 18 weekly *sa*, thru Bison Adv. Agency, Oakville.

KGGC, San Francisco

Carter Medicine Co., New York (liver pills), 6 weekly *ta*, thru Street & Finney Inc., N. Y.

WAAB, Boston

May Oil Burner Corp., Baltimore, 42 *sa*, thru Joseph Katz Co., Baltimore.

The Tutts Do Their Bit for Summer Radio

NO SOONER ARE THEY IN THEIR NEW SUMMER COTTAGE THAN DAD PUTS UP AN AERIAL FOR THE RADIO
NEVER MIND IT, HENRY - WE'LL GET A PORTABLE SET
CRAWFORD YOUNG
Copyright, 1936, by Central Press Association, Inc
6-8

From the Schenectady Gazette

NETWORK ACCOUNTS

(All Times EDST unless otherwise specified)

New Business

ACME WHITE LEAD & COLOR WORKS, Detroit (Lin-x, paints, etc.) on Aug. 30 starts *Smiling Ed McConnell* on NBC-Red network, Sundays, 5:30-6 p. m. Agency: Henri, Hurst & McDonald Inc., Chicago.

WASEY PRODUCTS Inc., New York (Barbasol) on Sept. 4 starts *Singing Sam* on NBC-Blue network, Fridays, 8:15-8:30 p. m., rebroadcast at 11:30 p. m. Agency: Erwin, Wasey & Co. Inc., N. Y.

TEXAS Co., New York (oil products) on Sept. 20 starts *Eddie Cantor, Jimmie Wallington & Co.* on entire CBS network, Sundays, 8:30-9 p. m. Agency: Hanff-Metzger Inc., N. Y.

PROCTER & GAMBLE Co., Cincinnati (Camay soap) on Aug. 31 starts *Pepper Young's Family* on 5 NBC-Blue network stations, Mon. thru Fri., 10:30-10:45 a. m. Agency: Pedlar & Ryan Inc., N. Y.

PROCTER & GAMBLE Co., Cincinnati (Ivory Flakes) on July 6 starts dramatic program on 7 NBC-Blue network stations (KDKA to be added Aug. 31) Mon. thru Fri., 11:45-12 noon. Agency: Blackman Adv. Inc., N. Y.

PROCTER & GAMBLE Co., Cincinnati (Oxydol) on July 6 starts *Five Star Jones* on 3 NBC-Blue network stations (WJZ, WHAM, WSYR), Mon. thru Fri., 12-12:15 noon. On and after Aug. 31 program will add KDKA and WLS and change time to 10:15-10:30 a. m. Agency: Blackett-Sample-Hummert Inc., Chicago.

PRINCESS PAT Ltd., Chicago (cosmetics) on June 21 started *Tale of Today* on 6 NBC-Red stations, Sundays, 6:30-7 p. m. Agency: McJunkin Adv. Co., Chicago.

PROCTER & GAMBLE Co., Cincinnati, on July 6 starts *Vic & Sade* on 5 NBC-Blue stations, Mon. thru Fri., 11:30-11:45 a. m. Agency: Blackman Adv. Inc., N. Y.

PROCTER & GAMBLE Co., Cincinnati (Crisco) on June 29 renewed *Vic & Sade* on 35 NBC-Blue stations, Mon. thru Fri., 11:30-11:45 a. m. Agency: Blackman Adv. Inc., N. Y.

PROCTER & GAMBLE Co., Cincinnati (Oxydol) on July 6 starts *Five Star Jones* on 4 NBC-Blue stations, Mon. thru Fri., 12-12:15 noon. Agency: Blackett-Sample-Hummert Inc., Chicago.

DENTISTS SUPPLY Co., New York, on Sept. 22 starts *The Dentist Says* on 3 Inter-City stations, Tues., Thurs., quarter-hour. Agency: A-W Adv. Agency, N. Y.

GENERAL FOODS Corp., New York (Diamond salt) on Sept. 7 starts *The Folk Singer*, Mondays, 9:30-9:45 p. m. Agency: Advertisers Broadcasting Co., N. Y.

WEBSTER-EISENLOHR Inc., on June 22 adds WCBM and WIP to *Today's Winners* on Inter-City Group.

Renewal Accounts

PROCTER & GAMBLE Co., Cincinnati, on July 6 starts *Home Sweet Home* on 12 NBC-Blue stations, Mon. thru Fri., 11:15-11:30 a. m. Agency: Blackman Adv. Inc., N. Y.

KRAFT-PHENIX CHEESE Corp., Chicago, on July 30 renews *Kraft Music Hall* on 57 NBC-Red stations, Thurs., 10-11 p. m. Agency: J. Walter Thompson Co., N. Y.

PROCTER & GAMBLE Co., Cincinnati, on June 29 renewed *Magic Voice* on 3 NBC-Blue stations, Mon. thru Fri., 4:45-5 p. m. Agency: Blackman Adv. Inc., N. Y.

THE MUTUAL BROADCASTING SYSTEM *PLATFORM*

Mutual Pledges....
"Two Cars in Every Garage"
"A Nine Shortly"
"A Fat Dinner Pail"
"Freedom for the Pursuit of Happiness"
"A Chicken in Every Pot"
"A More Abundant Life"
"Free Cigars"
"A Rounding of Prosperity Corner"

MUTUAL PLATFORM—After the nominating speech for Gov. Landon had been completed at the Cleveland GOP convention, Mutual Broadcasting System distributed 100 copies of its "platform" to "big shot" delegates. The four-page promotion piece, of which this is the inside, also was delivered to the regular agency-advertiser mailing list.

PROCTER & GAMBLE Co., Cincinnati (Oxydol) on June 29 renewed *Oxydol's Own Ma Perkins* on 51 NBC-Red stations, Mon. thru Fri., 3:15-3:30 p. m. Agency: Blackett-Sample-Hummert Inc., Chicago.

PROCTER & GAMBLE Co., Cincinnati, on June 29 renewed *The O'Neills* on 39 NBC-Red stations, Mon. thru Fri., 3:30-4 p. m. Agency: Blackman Adv. Inc., N. Y.

PROCTER & GAMBLE Co., Cincinnati, on June 29 renewed *Pepper Young's Family* on 43 NBC-Red stations, Mon. thru Fri., 3-3:15 p. m. (WLW at 4:30). Agency: Pedlar & Ryan Inc., N. Y.

R. J. REYNOLDS TOBACCO Co., Winston-Salem, N. C. (Camel cigarettes, Prince Albert) on June 30 renewed *Camel Caravan* on 82 CBS stations, Tues., 9:30-10:30 p. m. Agency: William Esty & Co. Inc., N. Y.

FORD MOTOR Co., Dearborn, Mich., (dealers) on June 30 renewed *Waring's Pennsylvanians* on 88 CBS stations, Tues., 9-9:30 p. m., repeat at 12 midnight. Agency: N. W. Ayer & Son Inc., N. Y.

Network Changes

GENERAL FOODS Corp., New York (Jell-O) on and after Aug. 30 will be heard over NBC-Red network Sundays, 7-7:30 p. m. Agency: Young & Rubicam Inc., N. Y.

Cable for Tower Lights

A NEW concentric cable to supply power to lights atop radio towers, first applied at WWJ, Detroit, has been announced by Western Electric Co. The cable is composed of an outer metallic tube which is at ground potential over its entire length, and an inner metallic tube insulated from the outer shell except at the end away from the tower where it is bonded to the outer sheath. Within the inner tube are two insulated conductors which carry the illuminating current. The assembled line is buried in the ground. As the line approaches the tower, the radio-frequency voltage on the conductors builds up until, at the point where the conductors commence to rise up the tower, they are at the same potential with respect to the ground as the tower itself. The new cable is declared to be practical for stations up to 50 kw.

Nathan Burkan's Will

NATHAN BURKAN, cofounder and general counsel of the American Society of Composers, Authors & Publishers, who died June 6, left an estate estimated at $1,500,000 to his widow and a five-year-old son Nathan Jr., his will filed in New York Surrogate's Court June 22 revealed. The will directed that all his books and works pertaining to copyright be left to ASCAP.

GRID RIVALS SEEK ANN ARBOR STATION

WITH John Fetzer, operator of WKZO, Kalamazoo, voluntarily dropping his application for a new station in Ann Arbor, home of the University of Michigan, two rival applicants headed by two noted football coaches were left in the field. Harry Kipke, Michigan grid coach, is one of the applicants, seeking 500 watts daytime on 800 kc.

The other application, shortly to be filed with the FCC, will name a group headed by Fielding H. Yost, Michigan athletic director and former grid coach, with other backers being Charles Verschoor, president, International Radio Co., Ann Arbor (Kadette); Prof. Waldo Abbot, U. of M. director of broadcasting; Al McDonald, president, McDonald Ice Cream Co.; Lewis G. Christman, vice president First National Bank; Harry Hawkins, Advertisers Publishing Co.; George Langford, Economy Baler Co.; John Hunter, head of a local dairy, and Phil Pack, local attorney and member of the legislature. The company would be known as Ann Arbor Broadcasting Co., with $50,000 paid in capital. Floyd Weissinger has been chosen as manager of the proposed new station, which may also have the backing of the *Ann Arbor Times-News*, published by the Booth syndicate of Michigan dailies.

INTER-CITY GROUP covered the Democratic convention with WIP, Philadelphia, as key station.

Like a
MODERN GENIE

KWK is doing very unusual things in the way of building up greater sales returns for their clients.

If you haven't a magic lamp to rub, just telephone or drop us a line and we will be there immediately.

THOMAS PATRICK INC.
HOTEL CHASE ST. LOUIS, MO.

PAUL H. RAYMER CO., Representatives
New York Chicago San Francisco

KWK

AGENCIES AND REPRESENTATIVES

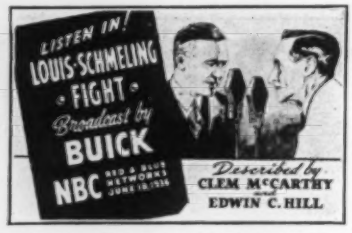
CONTRARY to published reports, Bess Johnson continues as radio executive of the Stack-Goble Adv. Agency, Chicago, with Al Shebel continuing as salesman on radio accounts, according to an official statement from that agency. Miss Johnson, who also plays the role of Frances Moran Mathews in *Today's Children*, has been on vacation for five weeks and from June 29 to July 5 broadcast from NBC in New York. Another Stack-Goble Chicago account, the *Singing Lady*, transferred its origination to New York June 29 when Ireene Wicker, who plays the lead, moved with her two children and secretary to a suburban New York home for the summer.

CHESTER H. McCALL, special assistant to the Secretary of Commerce, on July 1 becomes vice president of United States Adv. Corp., New York. The New York branch has been moved to 30 Rockefeller Plaza. Other offices are in Chicago, Toledo, Detroit and Baltimore.

BEN BOWDEN, formerly of the sales staff of WIP, Philadelphia, has joined Hancock-Payne Adv. Agency, that city.

WESTCO ADV. AGENCY, San Francisco, has appointed Michael Raffetto production manager in charge of all radio programs sponsored by the Sperry Flour Co. Raffeto, an NBC actor and producer, takes over his new duties July 1. He will continue to play the role of Paul in the NBC *One Man's Family* serial sponsored by Standard Brands Inc., in which he has appeared since it's inception four years ago.

BENSON & DALL Inc., Chicago agency, has moved to 360 N. Michigan Ave.



BIG EVENT — Buick Motor Co. distributed cards like this to promote its fight broadcast. Among other merchandising ideas were outlines of signs to be painted on dealers' windows and colored cards for showroom display.

CHARLES MARTIN, formerly of the *March of Time* scripting department, has joined Biow Co. Inc., New York, to head the production department and write the "Thrills" broadcast on the Philip Morris-NBC program. Mr. Martin replaces Phillips Lord in this assignment.

BRUCE MORGAN, of the radio production department of N. W. Ayer & Son Inc., New York, has resigned. He formerly handled the CBS *Atlantic Family* and the NBC *Kellogg College Prom* programs.

A. W. SCOTT, account executive of Beaumont & Hohman Inc., San Francisco, has been appointed manager of the radio department in that city.

RUTH PRITCHARD, in the office of the V. G. Freitag radio agency, Los Angeles, returned from Colorado late in June to rejoin the firm.

DONALD STAUFFER, of the radio dept. of Young & Rubicam Inc., New York, arrived in Hollywood in June in connection with production and talent activities for sponsors.

They're Off!

Get Your Results from WHN

SIX daily broadcasts a week of leading race-track and inning by inning baseball results offer you BIG audiences for spot announcements of your product.

3:55 to 5:15 p. m. Mon., Fri.
3:55 to 5:30 p. m. Tues., Wed., Thurs., Sat.

Racing Results Commentator: BROOKE TEMPLE
Baseball Results Commentator: MONIE HELLINGER

The low cost of participation in six daily broadcasts ($75) is the best small investment you can make in building BIG audiences. Another WHN achievement. Complete details on request. The racing results received through exclusive arrangement with Nationwide News Service.

WHN NEW YORK

1540 Broadway . . . . . Times Square
5,000 Watts L.S. . . . . 1,000 Watts Nights

National Advertising Representatives
E. KATZ SPECIAL ADVERTISING AGENCY
Chicago — Philadelphia — Detroit — Kansas City
Atlanta — Dallas — San Francisco

MILK IN CHICAGO
WCFL Program Brings Boost in Cities Distribution

AN INCREASE of 25% in the sale of milk in Chicago has been noted since WCFL, Chicago, started a contest in connection with a drive to unionize dairy employes. In charge of R. Calvert Haws, WCFL, program director, the campaign was designed to reach children as the ultimate consumers of milk.

The program theme was based on Buffalo Bill's early childhood in the West and it was titled *Pioneer's Trading Post*, The Pioneers Trading Post Club was formed, a requisite for membership being that applications carry endorsement of a union milk driver. More than 20,000 joined the club and at the end of ten weeks 32 dairies had voluntarily signed with the union. Percentage of milk handled by union employes was boosted from 80% to 92% and more than 700 union men were put back to work.

ROY V. CROWDER, formerly passenger traffic manager of the Grace Steamship Lines, San Francisco, has been appointed a vice-president of Kelly, Nason & Roosevelt Inc., and will be stationed in that city. J. Malcolm Dewees remains as Pacific Coast manager for the national agency, with headquarters in San Francisco.

WALTER J. HELD, Standard Oil Co. advertising executive in San Francisco, discussed "Building An Advertising Campaign for a Major Product", at the San Francisco Advertising Club meeting in the Palace Hotel, that city, on June 16. Stressing the importance of radio, he told of the part played by advertising in the preparation for launching an important new product in a highly competitive market.

WALTER B. MARTIN, recently with J. Walter Thompson Co. and formerly editor and manager of *Chain Store Management* magazine, has been appointed copy director of Key Adv. Co., Cincinnati.

CURT PETERSON, radio director of Marschalk & Pratt Inc., New York, spent two days in Charlotte, N. C., as the guest of William Schudt Jr., president and manager of WBT.

EDITH M. ABBOTT, radio account executive for Botsford, Constantine & Gardner Inc., San Francisco, will vacation at her Colorado ranch for one month, having left her desk June 27.

IDA RAISBACK, script writer of the New York office of the J. Walter Thompson Co., was transferred to Hollywood in June to work on the Lux program.

MICHAEL F. MAYGER, formerly with Philip O. Palmer agency and U. S. Adv. Corp., has joined Ford, Browne & Mathews, Chicago, as radio program director.

C. J. SCHULTZ, of the Detroit publicity staff working on the Chevrolet Motor Co. account for Campbell-Ewald Co., has been transferred to Chicago, where he will service the account. R. K. Edmonds, manager of the Chicago Campbell-Ewald office, has resigned.

EDWARD H. GARDNER, formerly executive secretary of the advisory committee on advertising of the Proprietary Association, has been appointed vice president of Morse International Inc., New York, to work on the Vick Chemical Co. account.

Kelvinator Corp. Asks Local Rates

Reps Claim National Rates Are Proper; May Go Before NAB

A NEW controversy over national versus local rates has cropped up in connection with placement of a Kelvinator Corp. (refrigerator) schedule of 16 quarter-hour transcriptions over a list of 40 to 50 stations. The campaign, called cooperative by the advertisers and by the agency, Geyer, Cornell & Newell Inc., New York, under the plan is to be placed through local distributors as a means of procuring the local rates.

Several station representatives, who contacted the agency on the account, claim it is national and should be placed nationally through them. Refrigerator manufacturers, however, for some time have been placing their advertising through local distributors both in newspapers and on the air. The dealer, in such cases, has paid a percentage of the advertising depending upon refrigerator sales in his territory.

May Go Before NAB

DESPITE the claims of representatives, the agency holds that newspapers have set the precedent on local rates to distributors and that radio logically should do the same. On the other hand, the representatives maintain that the business actually is national and that the copy is prepared on a national basis. A similar controversy arose recently in connection with placement of the Ford spot transcription circles through McCann-Erickson Inc. and many stations held out for and procured their national rates.

The Kelvinator series has been auditioned and accepted, with the transcriptions to be made by World Broadcasting System. The program features Donald Novis and dramatized commercials.

Because of the furore provoked recently by the Ford account and now the Kelvinator schedule, it is known that several of the larger representatives will urge their stations to crystallize sentiment at the NAB convention in Chicago July 6-8 against allowing local rates for anything other than strictly retail business. A uniform method of selling radio time, both as to rates and station coverage, it is said, will be urged.

Tide Water Adds Two

TIDE WATER OIL Co., New York (Veedol, Tydol) on June 22 began a new series of Transradio news broadcasts twice daily, 8:15-8:30 a. m. and 9:45-10 p. m., six days a week on WORK, York, Pa. The program is signed for 13 weeks. WDRC, Hartford, is being used by Tidewater for UP news reports Mondays through Saturdays, 7:45-8 a. m. The series is also signed for 13 weeks and began June 15. The sponsor is employing two announcers for these broadcasts, each announcer reading alternate items. Effective June 29 Tidewater renewed its news broadcasts on WFIL, Philadelphia, for another 13 weeks. Lennen & Mitchell Inc., New York, has the account.

RADIO ADVERTISERS

MARION R. GRAY Co., Los Angeles (Grayco shirts, cravats) which last year had to withdraw an offer of silk remnants suitable for quilts in a national spot campaign, because of the huge demand, is repeating the offer in a current campaign on KNX, Hollywood. No evidence of sale is required.

H. R. FLETCHER, formerly active in radio, has joined Bromiley-Ross Inc., outdoor advertising, as vice president.

A. SIEGEL & SONS Inc., New York (Carabana cigar) has appointed Austin & Rossiter Co., New York, to handle its account. Radio will be used in the fall.

HINTS SALES Inc., New York (Hints laxative mints) has placed its advertising account with W. I. Tracy Inc., New York. Radio is on the media list but no definite schedule has been arranged. Hints Sales is a newly organized firm to market the above product. George A. Stevens recently vice-president and general manager of Elizabeth Arden, New York (cosmetics) is head of Hints Sales.

NATIONAL BREWING Co., Baltimore, has appointed D. Stuart Webb Adv. Services, Baltimore, as its agency.

REPUBLICAN National Committee in June produced a series of 26 quarter-hour transcriptions under the caption of *The Great American Tragedy* at the Hollywood studios of Associated Cinema.

THE General Mills Inc. campaign for Wheaties, on WCAU, Philadelphia, consisting of six weekly baseball games, is placed by Knox Reeves Adv. Inc., Minneapolis.

E. W. BENNETT & Co., San Francisco (silver polish) for the first time is including radio in its advertising and on June 10 started for 13 weeks five-minute participation, Wednesdays, 10:45-11 a. m. (PST), in *Morning Hostess*, woman's program, with Elma Latta Hackett, on KFRC, that city. Emil Brisacher & Staff, San Francisco, is the agency.

Dr. Dafoe, Quint Doctor, On Carnation Broadcasts

DR. ALLAN DAFOE, personal physician of the Dionne Quintuplets, on June 29 started a series of radio talks as guest speaker of the Carnation *Contented Hour*, a Monday night (10:00 p. m.) broadcast on an NBC-Red network. It was Dr. Dafoe's first commercial appearance on the air. His talks are from CRCT, Toronto.

Dr. Dafoe describes his five little charges, Cecile, Annette, Emilie, Marie and Yvonne and tells anecdotes of their training, their diet, their attempts to master walking and talking, the personal characteristics of each child. He will also give information valuable to the thousands of Americans and Canadians who plan to visit the little settlement of Callander this summer. Erwin Wasey & Co., Ltd., Chicago, is the agency for Carnation Milk Co., Milwaukee, sponsors of the program.

CITIES SERVICE Co., New York (petroleum products) on June 26 added the entire NBC Southeastern group, permanently, to its NBC-Red network program, Fridays, 8-9 p. m. Lord & Thomas, New York, is the agency.

LUX DIRECTOR — Cecil B. DeMille, movie director, who is now conducting the Lux Radio Theatre programs on a CBS network.

Bireley's Coop. Discs

BIRELEY'S Inc., Los Angeles (Bireley's California Fruit Products) through the Philip J. Meany Co., Los Angeles advertising agency, is to record a comic strip of the air, *Dalt & Zumba*, at the Hollywood studios of Radio Recorders Inc. Script is by Jerry Cady. They will be placed by the Meany agency on nearly 30 stations to advertise Bireley orange juice, bottled by local dairies and delivered to homes. The deal will be a cooperative one between the sponsors and their local dealers.

KFBB, at Great Falls, Plans New Equipment, Gets CBS Affiliation

KFBB, Great Falls, Mont., will blossom forth with a new CBS affiliation and completely new equipment along with increased power about Aug. 15, according to anouncement June 20 by Mrs. Jessie Jacobsen, station manager. The station, along with KGVO, Missoula, Mont., recently signed CBS contracts, and service is awaiting installation of adequate telephone lines by A. T. & T.

A new high-fidelity Western Electric 5,000-watt transmitter, and a 420-foot Blaw-Knox vertical uniform cross-section radiator have been contracted for, Mrs. Jacobsen announced. In addition a forty-acre trace, four and one-half miles west of Great Falls, has been purchased as the transmitter site. Upon it will be built a modern fireproof structure. John Parker, KFBB chief engineer, will reside on the premises and also follow his hobby of farming.

KFBB is owned by Buttrey Broadcast Inc., and is one of the country's oldest stations. It was first licensed in Havre, Mont., in 1922, to Mr. Buttrey. He operated it without direct revenue until 1929 when he moved it to Great Falls and made it commercial. Mrs. Jacobsen has been its manager for the last eight years, during which time it has devoted from a 50-watter with studios and transmitter in the same room, to its present status with 1,000 watts night and 2,500 watts day.

J. C. Eggleston Named Sales Manager of WMC

WITH the resignation of Norwood H. Gwynn as commercial manager and Milton Simon as production manager to form the new Simon & Gwynn Adv. Agency, Memphis, Henry W. Slavick, general manager of WMC, announces the appointment of J. C. Eggleston as sales manager, with various other staff additions. Mr. Eggleston, who transfers from the advertising staff of the *Memphis Commercial Appeal*, operator of WMC, formerly was with the *Atlanta Journal*, and the Branham Co., publisher's representatives.

Other appointments announced by Mr. Slavick: G. Neill Ferguson, formerly with the *Memphis Press-Scimitar*, to the sales staff; W. H. Bowden, transferred from the *Commercial Appeal* to the advertising department; Tony Benander, producer of *Byry's Juvenile Hour*, to the production department.

Fungicide Spot Series

MOUNTAIN COPPER Co. Ltd., San Francisco, manufacturers of Mountain Copper Carbonate, a fungicide for the treating of seed wheat, has added KQW, San Jose, Cal., and KHSL, Chico, Cal., to the list of stations that will carry 50-word announcements and time signal announcements daily to wheat farmers in a 13-week summer campaign which started July 1. Other stations listed are KFPY, KUJ, KRLC, KTRB, KFBB, KTAR, KFH and KFBI. Kelso Norman Organization, San Francisco, is the agency.

BIG BUSINESS IN LITTLE TOWN

Auto Dealer in Tiny Settlement Uses WGY and Draws Extensive Trade from 100-mile Radius

AN AUTOMOBILE dealer in a village of less than 500 population has discovered that a high power broadcasting station can be used very profitably at 7:30 o'clock of a week-day morning to sell used cars and new cars.

The dealer firm is A. L. Parsons & Son of Central Bridge, N. Y., salesman for Ford cars. Through the newly organized advertising agency of Leighton & Nelson, the Parsons concern engaged 7:30 a. m. to 7:45 a. m., daily except Sunday from March 9 to May 16, on WGY, Schenectady.

Through WGY, the client reached a concentrated coverage over a 100-mile radius. His advertising on the air was directed entirely to the used car buyer. During a three-months period, A. L. Parsons & Son sold 823 units, of which 262 were new cars. During week-ends alone—that is, over a two-day period—the company sold between 60 and 70 cars. On every program one or more used car values were described as "today's special at Parsons" and almost without exception these cars were sold the same day they were announced. Customers often came from beyond the 100-mile radius area guaranteed by the station.

Naturally the advertising alone did not sell the cars. Back of the advertising was an established business and a reputation for reliability, fair dealing, excellent facilities and service. This is not a new experience for the Parsons organization. Aided by WGY last year this enterprising firm in the little village did nearly $1,000,000 worth of business in new Fords, used cars, parts and service.

Clear Channel Stations Hold Another Meeting

A MEETING of the Clear Channel Group, representing a dozen stations operating on clear channels which seek to safeguard them against further encroachments, was held in Washington June 14 at the call of Edwin M. Craig, WSM, Nashville, its chairman. The group was formed more than a year ago at a time when strenuous efforts were being made to bring about East-West Coast duplication on clear channels.

Present at the meeting were KFI, Los Angeles, represented by Earle C. Anthony, president, Harrison Holliway, general manager, W. P. Casson and Kelly Anthony; WFAA, Dallas, J. M. Moroney, vice president, Martin Campbell, general manager, Ray Collins, technical supervisor; WGN, Chicago, Carl J. Meyers, chief engineer; WHAM, Rochester, N. Y., E. A. Hanover, vice president, William Fay, general manager, Ray H. Manson, vice president and chief engineer; WHAS, Louisville, Credo Harris, manager; Barry Bingham, vice president, Lee Coulson, commercial manager; WHO, Des Moines, Joseph Maland, vice president, Wm. M. Branden, secretary, P. A. Loyet, chief engineer; WLS, Chicago, Burridge D. Butler, president, Homer Couchene, chief engineer; WLW, Cincinnati, R. J. Rockwell, technical supervisor, J. E. Whitehouse, chief transmission engineer, G. F. Leydorf, radiation engineer; WOAI, San Antonio, Hugh A. L. Halff, manager, J. T. Hallam, plant engineer; WSB, Atlanta, Lambdin Kay, general manager, C. G. Daugherty, chief engineer, and WSM, Mr. Craig, vice president and J. H. DeWitt, chief engineer.

Also in attendance were Louis G. Caldwell, Philip G. Loucks, Swagar Sherley, attorneys, and Harold B. Rothrock, radio engineer retained by the Clear Channel Group. Mr. Caldwell is counsel for the Group.

Kwik-On Expands List

McCLOSKEY VARNISH Co., Philadelphia, Chicago and Los Angeles, is enlarging its radio program nationally. Starting with 15 Western stations, it now is using ten in the Midwest and East and will double the number in the fall. The present programs, changed from the original spot announcements, are placed on station participating programs at the rate of one daily for each station. The radio portion of McCloskey advertising is handled by A. A. Butterworth Agency, Los Angeles. While the firm manufactures and distributes several products, its radio activity is confined to its Kwik-On Magic Finish, a varnish product for floors.

"PREFERRED POSITION"
JACKSON, MISSISSIPPI

TRANSCRIPTIONS

STANDARD RADIO Inc., announces that seven new stations have been added to the list subscribing to the transcribed Standard Program Library. They are KTSM, El Paso; WNBR, Memphis; WTHT, Hartford; WAAW, Omaha; WNBC, New Britain, Conn.; KGAR, Tucson, Ariz.; and CJRC, Winnipeg. Standard also announces a third group of purchasers of their new Sound Effects Library: KMPC, Beverly Hills, Cal.; WFBC, Greenville, N. C.; WCAE, Pittsburgh; WFJZ, Fort Worth; KFSD, San Diego; WEAN, Providence; WICC, Bridgeport, Conn.; CJCA, Edmonton, Canada; WSB, Atlanta; WISN, Milwaukee; WTHT, Hartford, Conn.; WGR, Buffalo; WAAW, Omaha; WBNY, Buffalo; WJAY, Cleveland; WCOL, Columbus.

IRVING FOGEL, onetime head of Hollywood Radio Attractions and doing radio versions of pictures for Universal Pictures Corp., the middle of June was appointed transcription program director for Associated Cinema Studios, Hollywood. San Francisco offices of Associated were opened June 20 at 310 Sansome St. in charge of Wilfred Crowell, the past ten years an executive with Schwabacher-Frey Co., San Francisco.

THE *Sunday Players*, dramatic transcription half-hour series of Mertens & Price, Los Angeles, has been renewed by Valley Forge Memorial Estates for 39 weeks on WFIL, Philadelphia; for 26 weeks by William Cook on WCAO, Baltimore; 26 by A. W. Bennett Co. on WMBG, Richmond, Va., and also for 26 on 2GB, Sydney, Australia. Angelus Abbey Mausoleum, Long Beach, Cal., is sponsoring the series on KFWB, Hollywood.

UNIVERSAL MICROPHONE Co., Inglewood, Cal., has started to manufacture a cutting lubricant, preservative and conditioner for use with the recording of instantaneous discs.

AMERICAN RECORD Corp., Hollywood pressing and processing plant, has installed an audition room with playback apparatus and receiving sets.

LORENZO KENNON, formerly radio executive for the Congoin Co., Los Angeles, has been appointed general manager of Radio Release Ltd., Hollywood transcription producers.

SILKA Recording Studios, Wilmar, Cal., in June moved to 826 Herkimer St., Pasadena, Cal.

FENTON EARNSHAW in June was elected a director of Earnshaw-Young Inc. and of Earnshaw Radio Productions, Hollywood. He is a son of Harry A. Earnshaw and has just returned from six months in London.

Safeway Meat Spots

SAFEWAY STORES Inc., Oakland, Cal. (chain grocery and market), to call attention to its fresh meat delivery service in Los Angeles, on June 25 started a ten-day campaign using one-minute dramatized transcription announcements daily on four stations in that territory. The campaign is a continuation of that successfully started March 11 for ten days to announce inauguration of the delivery service. Discs made by MacGregor & Sollie Inc., transcription producers, were placed on KNX and KFWB, Hollywood; KHJ and KFI, Los Angeles. J. Walter Thompson Co., San Francisco, is the agency.

WMEX, Boston 100-watter, has applied to the FCC for authority to go to 5,000 watts with a directional antenna on 1470 kc.

ANPA Media Data Full of Omissions

IGNORING national spot and local radio advertising entirely, the Bureau of Advertising of the American Newspaper Publishers Association in latter June issued its 1935 report on national advertiser budgets. The report showed that of a combined total of $231,107,948 spent by 387 national advertisers covered by the study, $134,440,000 or 58% went to newspapers, $61,943,228 or 26.8% went to magazines and $34,724,720 or 15% went to chain broadcasting.

That the figures are entirely inadequate so far as radio is concerned, even considering major advertisers, is disclosed by comparisons with *National Advertising Records'* own compilation, that being the source given for the radio figures. NAR shows expenditures for radio time on the major networks as $49,283,879 for the year, these figures being furnished to NAR by the networks.

Moreover, according to the 1936 BROADCASTING *Year Book*, national non-network advertising in 1935 amounted to $17,063,688, local time to $19,281,735 and regional networks to $1,110,739.

Among the major network radio advertisers not listed in the ANPA study were Wasey Products Inc. (Musterole); Barbasol Co.; William R. Warner Co. (Vince and Sloan's Liniment); Cities Service Co.; Lady Esther Co., and Lever Bros. (Lux soap); International Cellucotton Products Co. (Kleenex).

Considering the ANPA's own list of 387 advertisers, further analysis shows that 275, or 71.1%, carry no radio; 112 are radio advertisers. Of these 112, analysis reveals that 42 spend more for radio than magazines, 12 more for radio than newspapers and 23 use radio as a major medium.

Accounts like Pepsodent, Sinclair Refining, Alemite Corp., Richfield Oil, Wyeth Chemical, F. W. Fitch Co., Kolynos toothpaste, H. O. Hecker Co., MacFadden Publications, RCA Radiotron, Philip Morris Co. Ltd., spend more for radio than magazines and newspapers using even the ANPA table.

The breakdowns naturally give newspapers the best showing generally, which they would have had in any case in view of their larger number and scope. Even with the hand-picked group of companies selected they show a rise in chain broadcasting from 1930 through 1935. Whereas in 1930 network radio claimed 5.3 cents of the ANPA selected group's advertising dollar, in 1931 the figure was 8.1 cents, in 1932 11.3 cents, in 1933 10.7 cents, in 1934 12.2 cents, and in 1935 13.4 cents.

WWVA's Trial

A FEATURE of the recent celebration by WWVA, Wheeling, of its fifth year as a CBS station was the "trial" of the station before the court of public opinion. The station was asked to give evidence of its right to observe the anniversary, the proceedings being staged in a court room setting and conducted by staff members.

ANNOUNCING

Mr. and Mrs.

Ely Culbertson

BROADCAST

LATEST

1936~1937

CONTRACT BRIDGE

WITH

NEW TIE-UP Between Radio and Direct Sales

OFFICIAL

Only radio presentation of Culbertson System, *authorized and presented by Culbertsons, themselves!* With copyrighted printed reproductions for weekly distribution to listeners. Service covers all the *brand-new* developments of Contract Bridge. Transcriptions prepared by World.

NEW Campaign of *40 quarter-hours*, easily sold to Laundries, Dairies, etc. Equally effective day or night. Includes unique merchandising methods and material that have been *proved* in actual practice. Test campaigns show Contract Bridge appeals to substantial income groups. Exclusive tie-up plan produces direct sales contacts for advertisers. Write for full particulars.

RADIO BRIDGE AD SERVICE

1339 42nd Street Des Moines, Iowa

YANKTON, S. DAK.

WNAX

— for a better coverage of South Dakota plus a wide listening audience in North Dakota, Minnesota, Iowa and Nebraska

REPRESENTATIVES

New York - Chicago
Wilson-Dalton-Robertson

Kansas City
Howard Wilson

"The Best Daytime Station in the Land"

Newspaper Ownership and Control of Radio Stations

(Revised to July 1, 1936; Copyright 1936 by Broadcasting Publications, Inc.)

EXACTLY 171 broadcasting stations in the United States, one in Hawaii and 15 in Canada are now owned in whole or part by newspaper publishers, under purchase option to newspaper interests or authorized for construction by newspaper interests. Because of the unmistakable trend of recent months towards newspaper ownership, which as of July 1 finds practically one-fourth of all the stations in this country with corporate newspaper affiliations, BROADCASTING *herewith publishes an up-to-date revision of its 1936 Year Book compilation.*

ALABAMA

WSGN, Birmingham — Owned by Birmingham News and Age-Herald.

ARIZONA

KTAR, Phoenix—Owned by Phoenix Arizona Republic and Gazette.

ARKANSAS

KARK, Little Rock — Affiliated (interlocking ownership) with The Arkansas Farmer (weekly).
KELD, El Dorado—Affiliated (interlocking ownership) with The Arkansas Farmer, Little Rock.
KTHS, Hot Springs—Under purchase option to interests owning The Arkansas Farmer.
KCMC, Texarkana—Owned by Texarkana Gazette and News (See Texas).

CALIFORNIA

KYA, San Francisco—Affiliated (interlocking) with San Francisco Examiner (Hearst).
KEHE, Los Angeles — Owned by Evening Herald Publishing Co. (Hearst).
KLX, Oakland—Owned and operated by Oakland Tribune.
KFBK, Sacramento—Owned by Sacramento Bee (McClatchy newspapers).
KMJ, Fresno—Owned by Fresno Bee (McClatchy newspapers).
KWG, Stockton—Owned by the McClatchy newspapers (Sacramento Bee, Fresno Bee and Modesto Bee).
KERN, Bakersfield — Owned by McClatchy newspapers (Fresno Bee, Modesto Bee and Sacramento Bee).
KDON, Del Monte, Cal. — Affiliated (corporate) with Monterey Peninsula Herald.

COLORADO

KLZ, Denver — Owned by publishers of Oklahoma City Oklahoman and Times.

CONNECTICUT

WTHT, Hartford—Construction permit for new 100-watt daytime station granted to Hartford Times.
W1XBS, Waterbury—Owned by Waterbury Republican and American.

DELAWARE

WILM and WDEL, Wilmington — Controlling stock owned by Steinman brothers, also publishers of Lancaster (Pa.) New Era and Intelligencer-Journal.

FLORIDA

WDAE, Tampa — Owned by Tampa Times.
WIOD, Miami—Controlled by Miami Daily News.
WCOA, Pensacola — Owned by publisher of Pensacola News and Journal, Jacksonville Journal, Panama City (Fla.) Herald, and Reading (Pa.) Times.

FLORIDA—(Continued)

WTAL, Tallahassee — Operated by Florida Capitol Broadcasters Inc., whose president, Gilbert Freeman, is publisher of Avon Park (Fla.) Highlands County Pilot, Scenic Highlands Sun and Lake Placid News. (weeklies).

GEORGIA

WSB, Atlanta — Owned by Atlanta Journal.

ILLINOIS

WGN, Chicago — Owned by Chicago Tribune.
WAAF, Chicago—Owned by Chicago Daily Drovers Journal.
WLS, Chicago—Owned by the Prairie Farmer (weekly).
WDWS, Champaign—Construction of new station by Champaign News-Gazette authorized.
WHBF, Rock Island — Owned by Rock Island Argus.
WROK, Rockford — Affiliated (corporate) with Rockford Register-Republic and Star.

INDIANA

WSBT and WFAM, South Bend — Owned by South Bend Tribune.
WTRC, Elkhart—Owned by Elkhart Daily Truth.
WWAE, Hammond—Affiliated (interlocking) with Lake County Times, Hammond.

IOWA

KSO and KRNT, Des Moines — Owned by Des Moines Register & Tribune.
WMT, Cedar Rapids—Owned by the Des Moines Register & Tribune.
KSCJ, Sioux City—Owned by Sioux City Journal.

KANSAS

WLBF, Kansas City — Owned by Kansas City Kansan (Capper publications).
WIBW, Topeka — Owned by Topeka Capital (Capper publications).
KFH, Wichita — 50% owned by Wichita Eagle.
KGGF, Coffeyville—Owned by Coffeyville Journal.
KGNO, Dodge City — Affiliated (corporate) with Dodge City Globe.

KENTUCKY

WHAS, Louisville—Owned by Louisville Courier-Journal and Times.
WCMI, Ashland — Affiliated (corporate) with Ashland Daily Independent.
WLAP, Lexington — Under purchase option to publishers of Lexington Herald.

LOUISIANA

KWKH, KTBS and KWEA, Shreveport—Owned by Shreveport Times.
WJBO, Baton Rouge—Controlled by Baton Rouge Star-Times and Morning Advocate.
KVOL, Lafayette — 50% owned by Lafayette Advertiser.

MAINE

WSPG, Portland — Construction of new station by Portland Broadcasting System Inc., affiliated through stock ownership with Portland Press Herald, authorized.

MARYLAND

WBAL, Baltimore — Affiliated (interlocking) with Baltimore News-Post & American (Hearst).

MASSACHUSETTS

WTAG, Worcester—Owned by Worcester Telegram and Gazette.
WNBH, New Bedford — Owned by New Bedford Mercury and Standard-Times.

MICHIGAN

WWJ, Detroit — Owned by Detroit News.
WELL, Battle Creek—Owned by Battle Creek Enquirer-News.
WBEO, Marquette—Owned by Marquette Mining Journal.

MINNESOTA

WTCN, Minneapolis—Owned jointly by Minneapolis Tribune and St. Paul Pioneer Press & Dispatch.
WEBC, Duluth-Superior — Affiliated (corporate) with Superior (Wis.) Telegram.
WMFG, Hibbing — Affiliated (corporate) with Superior (Wis.) Telegram.
WHLB, Virginia — Affiliated (corporate) with Superior (Wis.) Telegram. Construction authorized.
KGFK, Moorhead—Affiliated (corporate) with Fargo (N. D.) Forum.

MISSISSIPPI

WQBC, Vicksburgh—Owned by Vicksburgh Post and Herald.
WCOC, Meridian — Owned by publishers of Clark County Tribune, Quitman, Miss. (weekly).

MISSOURI

WDAF, Kansas City — Owned by Kansas City Star.
KSD, St. Louis—Owned by St. Louis Post Dispatch.
WMBH, Joplin — Affiliated (corporate) with Joplin Globe & News-Herald.
KFEQ, St. Joseph—Affiliated (corporate) with St. Joseph News-Press and Gazette.
KFRU, Columbia — Under purchase option to St. Louis Star-Times.

MONTANA

KDNC, Lewiston — Construction of new station by Lewiston Democrat-News authorized.

NEBRASKA

KOIL, Omaha — Council Bluffs; KFAB and KFOR, Lincoln—24% of stock owned by Lincoln Star and 25% by Lincoln State Journal.
WJAG, Norfolk—Owned by Norfolk Daily News.

NEVADA

KOH, Reno — Owned by the McClatchy newspapers of California.

NEW MEXICO

KOB, Albuquerque — Under purchase option to publisher of Albuquerque Journal.
KGGM, Albuquerque—Owned by publishers of Lexington (Ky.) Herald.
KICA, Clovis — 66 2/3% owned by publishers of Lexington (Ky.) Herald.

NEW YORK

WINS, New York City — Owned by Hearst Radio Inc.; affiliated with New York American and Journal.
WEVD, New York—Affiliated (corporate) with The Jewish Daily Forward.
WBEN, Buffalo — Owned by Buffalo News.
WEBR, Buffalo—Under purchase option to Buffalo News.
WOKO and WABY, Albany — Affiliated (corporate) with Albany Knickerbocker Press and Evening News (Gannett newspapers).
WHEC, Rochester — Controlled by Rochester Democrat & Chronicle and Times-Union (Gannett).
WESG, Elmira-Ithaca — Operated under lease from Cornell University by Elmira Star-Gazette (Gannett).
WHDL, Olean—Affiliated (corporate) with Olean Times Herald (Gannett).
WCAD, Canton—Under option to be operated by lease from St. Lawrence University by Watertown Times.

NORTH CAROLINA

WWNC, Asheville — Owned by Asheville Citizen and Times.
WSJS, Winston-Salem — Owned by Winston-Salem Journal and Twin City Sentinel.
WDNC, Durham — Owned by Durham Herald.

NORTH DAKOTA

WDAY, Fargo — Affiliated (corporate) with Fargo Forum.

OHIO

WHK, Cleveland — Owned by Cleveland Plain Dealer.
WJAY, Cleveland — Owned by Cleveland Plain Dealer.
WHKC, Columbus — Owned by Cleveland Plain Dealer.
WBNS, Columbus — Affiliated (interlocking) with Columbus Dispatch.
WCOL, Columbus — Affiliated (interlocking) with Ohio State Journal.
WHBC, Canton—Under purchase option to Brush-Moore Newspapers (Canton Repository).
WCPO, Cincinnati—Affiliated (interlocking control) with Cincinnati Post (Scripps-Howard).
WSMK, Dayton — Affiliated (corporate) with the Dayton Herald & Journal.
WHIO, Dayton — Owned by Dayton Daily News and affiliated with the Springfield News and Sun.
WKBN, Youngstown—40% owned by Cleveland Plain Dealer.

OKLAHOMA

KVSO, Ardmore—Owned by Ardmore Daily Ardmoreite.
KCRC, Enid—Affiliated (interlocking control) with Enid News & Eagle.
KBIX—Owned by Muskogee Phoenix and Times-Democrat.
WKY, Oklahoma City — Owned by Oklahoma City Oklahoman and Times.
KGFG, Oklahoma City — Under purchase option to Harold Hough, circulation manager of Ft. Worth Star-Telegram.
KOMA, Oklahoma City—Under purchase option to Hearst Radio Inc.
KGFF, Shawnee — Affiliated (interlocking ownership) with Shawnee News and Star (Stauffer newspapers).

OREGON

KGW, Portland—Owned by Portland Oregonian.
KEX, Portland — Operated under lease from NBC by Portland Oregonian.
KOIN, Portland — Affiliated (corporate) with Portland Oregon Journal.
KALE, Portland — One-third owned by Portland Oregon Journal.
KRNR, Roseburg — Owned by the Roseburg News-Review, whose publisher also owns Klamath Falls Herald-News and is part owner of Medford Mail Tribune.

PENNSYLVANIA

WHAT, Philadelphia — Owned by Philadelphia Public Ledger.
WCAE, Pittsburgh—Affiliated (interlocking) with Pittsburgh Sun-Telegraph (Hearst).
WWSW, Pittsburgh—Owned by Pittsburgh Post-Gazette.
WSAN, Allentown—Owned by Allentown Call.
WQAN, Scranton—Owned by Scranton Times.
WHP, Harrisburg — Affiliated (interlocking control) with Harrisburg Telegraph.
WKBO, Harrisburg — Affiliated (interlocking control) with Harrisburg Telegraph.
WGAL, Lancaster—Controlling stock owned by Steinman brothers, also publishers of Lancaster Intelligencer-Journal and New Era.

(Continued on page 107)

COLOR .....RADIO

Not always the "biggest", but the greatest man . . . the man with Punch! Character! Personality! The man with "Color", as we call it today.

Since the beginning of time, mankind has followed the winner . . . the man who showed consistent ability to thwart the common enemy — to bag the most game — to promote the welfare of the tribe.

So, too, with radio stations! It isn't Power in watts or frequency, but "Color" that attracts the biggest audience . . . that produces, and holds, "Box-Office" results!

That's why KSTP holds the Big National as well as the Big Local Accounts year after year!

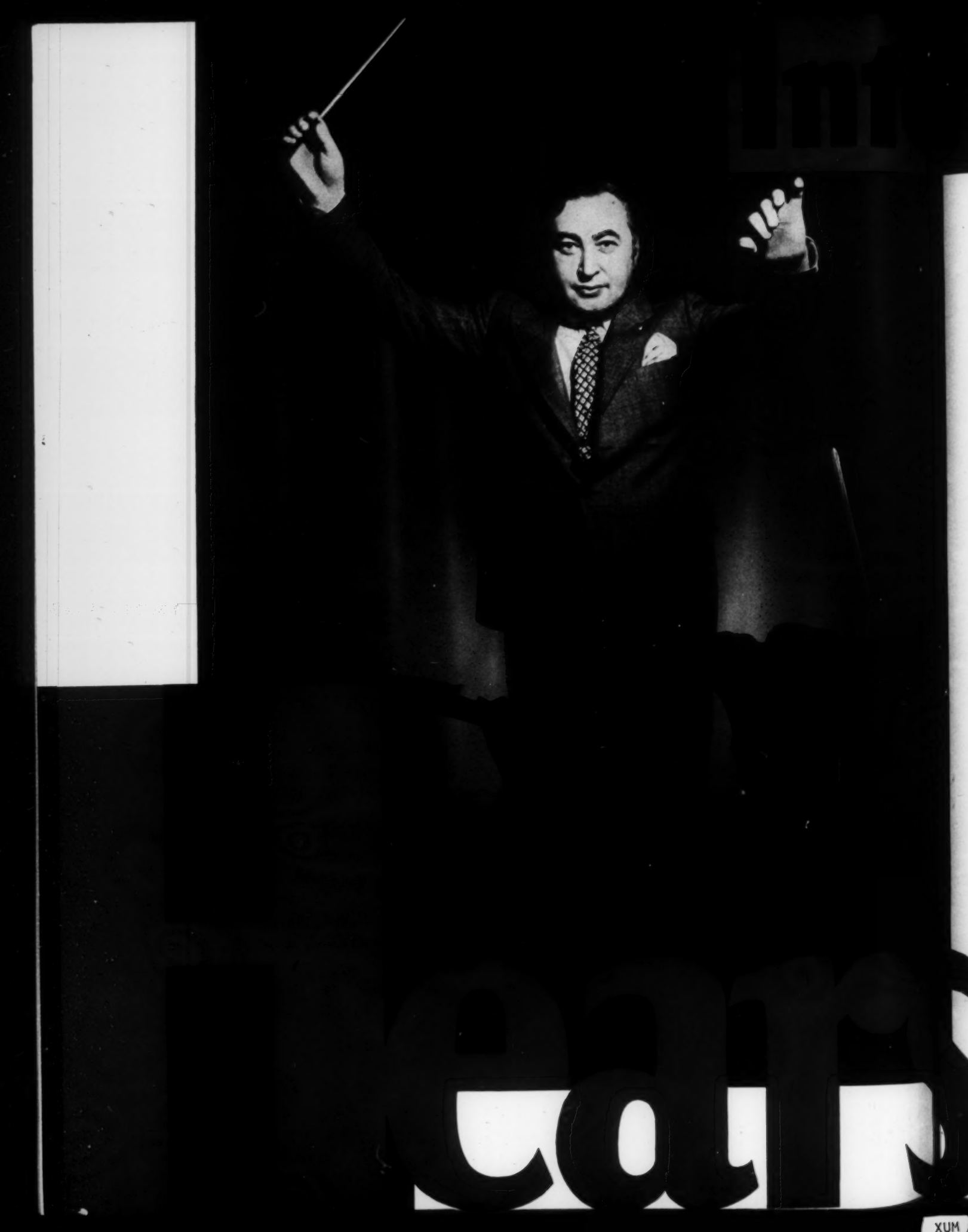
KSTP's Dominant Position in the 8th U. S. Retail Market — that metropolitan area in and around Minneapolis and St. Paul where 1,250,000 residents spend 74.6 cents out of every retail dollar in the entire State of Minnesota — is due to its Personality! Its Character! Its "Color"!

MINNEAPOLIS **KSTP** SAINT PAUL

NORTHWEST'S LEADING RADIO STATION

For Rates and Schedules, Address: KSTP, MINNEAPOLIS-ST. PAUL, MINN., or our NATIONAL REPRESENTATIVES: In New York—Paul H. Raymer Co. . . . . In Chicago, Detroit, San Francisco—John Blair Company

KSTP is the exclusive outlet in Minnesota for N. B. C. Red and Blue Networks



# of 8

MAJOR MARKETS

AS EASY TO BUY ALL EIGHT STATIONS AS ONE

SERVICE FROM SALE TO BROADCAST THROUGH ONE ORGANIZATION

st RADIO

WCAE • PITTSBURGH
WBAL • BALTIMORE
KTSA • SAN ANTONIO
WISN • MILWAUKEE

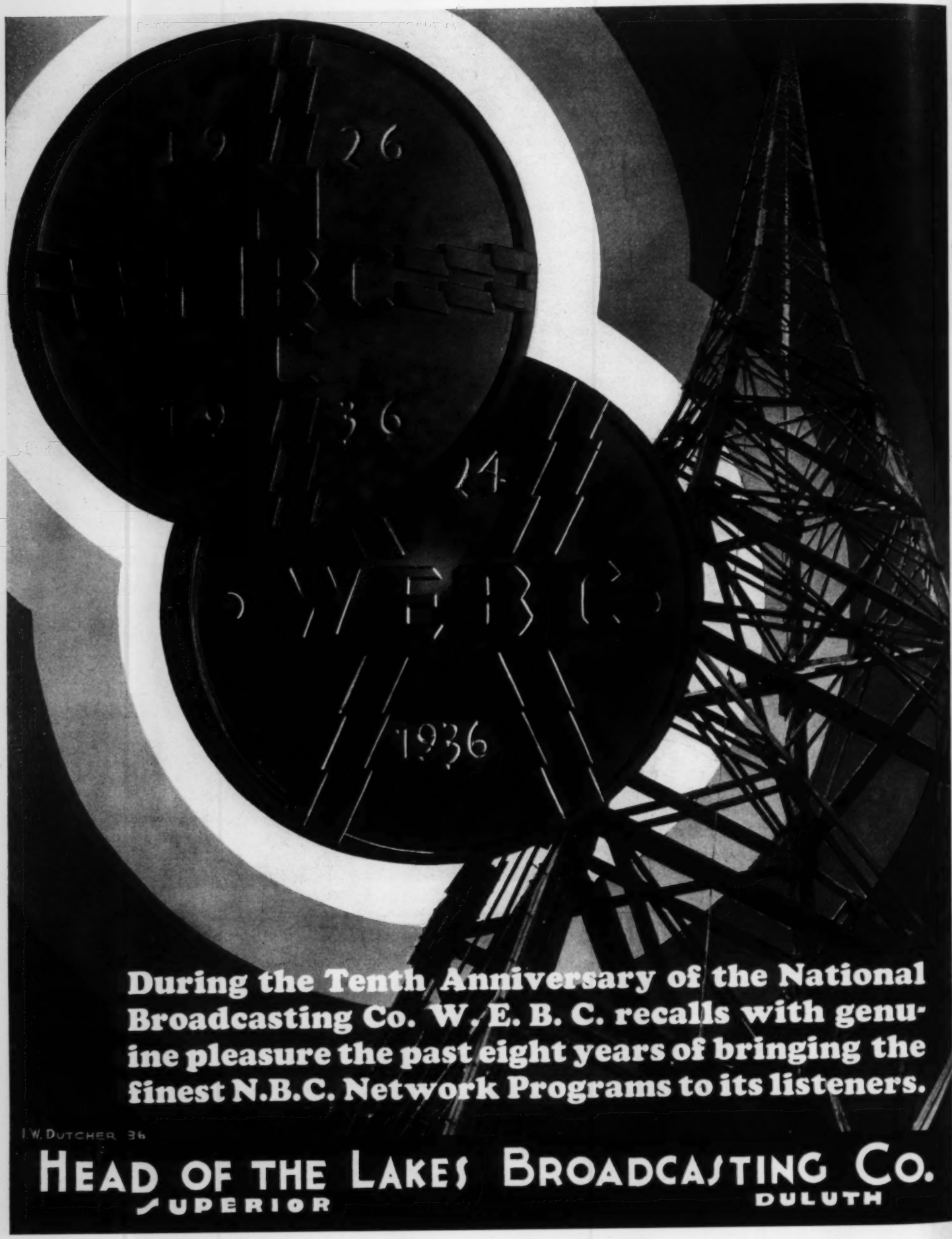
★

KYA • SAN FRANCISCO
WINS • NEW YORK
KEHE • LOS ANGELES
KNOW • • • AUSTIN

HEARST RADIO NATIONAL REPRESENTATIVES

959 EIGHTH AVE., NEW YORK-326 W. MADISON ST., CHICAGO-HEARST BLDG. SAN FRANCISCO

XUM



During the Tenth Anniversary of the National Broadcasting Co. W. E. B. C. recalls with genuine pleasure the past eight years of bringing the finest N.B.C. Network Programs to its listeners.

I. W. DUTCHER 36

HEAD OF THE LAKES BROADCASTING CO.

SUPERIOR DULUTH

Newspaper Control of Stations

(*Continued from page 102*)

PENNSYLVANIA—(Continued)

WORK, York—Controlling stock owned by Steinman brothers, also publishers of Lancaster New Era and Intelligencer-Journal.

WAZL, Hazleton — Controlling stock owned by Steinman brothers, also publishers of Lancaster New Era and Intelligencer-Journal.

WRAK, Williamsport—Controlled by Williamsport Sun-Gazette.

WKOK, Sunbury — Affiliated (interlocking control) with Sunbury Item.

WEST, Easton — Controlling stock owned by Steinman brothers, also publishers of Lancaster Intelligencer-Journal and New Era.

WJAC, Johnstown — Controlled by Johnstown Tribune and Democrat.

SOUTH CAROLINA

WAIM, Anderson—Owned by Anderson Independent and Daily Mail.

WFBC, Greenville — Owned by the Greenville News-Piedmont.

TENNESSEE

WMC, Memphis—Owned by Memphis Commercial Appeal.

WNBR, Memphis — Under purchase option to Memphis Commercial Appeal.

WTJS, Jackson — Owned by Jackson Sun.

WNOX, Knoxville—Affiliated (interlocking control) with Knoxville News-Sentinel (Scripps-Howard).

TEXAS

WFAA, Dallas — Owned by Dallas News and Journal.

KRLD, Dallas — Owned by Dallas Times-Herald.

WBAP, Fort Worth—Owned by Fort Worth Star-Telegram.

KGKO, Fort Worth—Owned by Fort Worth Star-Telegram.

KPRC, Houston—Controlled by Houston Post.

KTRH, Houston—Owned by Houston Chronicle.

KXYZ, Houston — Affiliated (interlocking control) with Houston Chronicle.

KGNC, Amarillo—Owned by publishers of Amarillo Globe-News, who also has interests in Midland Reporter-Telegram, Lubbock Avalanche-Journal, Dalhart Texan, Shamrock Texan, Childress Index (all in Texas); Atchison (Kan.) Globe, and Falls City (Neb.) Journal.

KFYO, Lubbock — Affiliated (corporate) with Lubbock Avalanche Journal, which is owned by same interests as Amarillo Globe-News.

KCMC, Texarkana — Owned by Texarkana Gazette and News (See Arkansas).

KIUN, Pecos — Affiliated (interlocking ownership) with Pecos Enterprise (weekly).

KPDN, Pampa — Owned by Pampa Daily News.

KTSA, San Antonio — Owned by Hearst Radio Inc. (San Antonio Light is Hearst newspaper.)

KNOW, Austin — Owned by Hearst Radio Inc.

WACO, Waco — Under purchase option to Hearst Radio Inc.

KGFI, Corpus Christi — Affiliated (corporate) with Corpus Christi Caller-Times.

KGKL, San Angelo—33% owned by publisher of San Angelo Standard-Times, who also has interests in Abilene Reporter-News, Sweetwater Reporter, Big Spring Herald, Paris News and Corpus Christi Caller-Times.

KBST, Big Spring — Construction of new station by Big Spring Herald authorized.

KPLT, Paris — Construction of new station by Paris News authorized.

KRBC, Abilene—Construction of new station by Abilene Reporter-News authorized.

KRRV, Sherman — Construction of new station by interests including Sherman Democrat authorized.

UTAH

KSL, Salt Lake City—Fifty per cent owned by Salt Lake Tribune.

KLO, Ogden—Affiliated (interlocking control) with Ogden Standard-Examiner.

VERMONT

WCAX, Burlington—Owned by Burlington Daily News.

WDEV, Waterbury—Owned by Waterbury Record (weekly) and Stowe Journal.

VIRGINIA

WDBJ, Roanoke—Owned by Roanoke Times and World-News.

WTAR, Norfolk—Owned by Norfolk Ledger-Dispatch and Virginian Pilot.

WPHR, Petersburg — Owned by publishers of Richmond News-Leader.

WEST VIRGINIA

WHIS, Bluefield — Owned by Bluefield Daily Telegraph and Sunset News.

WSAZ, Huntington — Owned by the Huntington Advertiser and Herald-Dispatch.

WCHS, Charleston — Owned by the Huntington Advertiser and Herald-Dispatch.

WISCONSIN

WTMJ, Milwaukee — Owned by Milwaukee Journal.

WISN, Milwaukee—Owned by Hearst Radio Inc.; affiliated with Milwaukee Sentinel and Wisconsin News.

WIBA, Madison — Owned jointly by Madison Capital Times and Wisconsin State Journal.

WEBC, Superior-Duluth — Affiliated (corporate) with Superior Telegram (See Minnesota).

WCLO, Janesville—Owned by Janesville Gazette.

KFIZ, Fond du Lac—Owned by Fond du Lac Commonwealth Reporter.

WKBH, La Crosse — Affiliated (interlocking) with La Crosse Tribune and Leader-Press.

WRJN, Racine — Owned by Racine Journal-Times.

WHBL, Sheboygan — Owned by Sheboygan Press.

HAWAII

KGU, Honolulu—Owned by Honolulu Advertiser.

CANADA

CHNS, Halifax, N. S. — Owned by Halifax Herald and Mail.

CKAC, Montreal — Owned by Montreal La Presse.

CHLP, Montreal — Owned by Montreal La Patrie.

CFPL, London, Ont.—Owned by London Free Press.

CKCK, Regina, Sask.—Owned by Regina Leader-Post.

CFAC, Calgary, Alta. — Owned by Calgary Herald.

CJCJ, Calgary, Alta.—Owned by Calgary Albertan.

CJCA, Edmonton, Alta. — Owned by Edmonton Journal.

CKCD, Vancouver, B. C.—Owned by Vancouver Daily Province.

CFJC, Kamloops, B. C. — Owned by Kamloops Sentinel.

CHSJ, St. John, N. B. — Controlled by St. John Telegraph-Journal and Times-Globe.

CJKL, Kirkland Lake, Ont. — Affiliated (interlocking control) with Timmins, Ont. Press.

CKGB, Timmins, Ont. — Affiliated (corporate) with Timmins Press.

CKCO, Sudbury, Ont. — Owned by Sudbury Star.

CKOV, Kelowna, B. C. — Affiliated (corporate) with Kelawna Courier, Vernon News and Penticton Herald (weeklies).

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

You Can't Sell WASHINGTON, D.C. *without* WOL

1. First in number of local advertisers!
2. First in number of contract renewals with local accounts . . . Proves Results!
3. Revenue for first 5 months of 1936 shows an increase of 73% over 1935!
4. Member Inter-City Group—New Western Electric High Fidelity Transmitter—RCA 70 Double Turntables—Transradio News Service — Standard Radio Library . . . Other Program Features!

AMERICAN BROADCASTING COMPANY
ANNAPOLIS HOTEL
WASHINGTON, D. C.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Albert F. Murray
Television Expert of Philco and Chairman, Television Committee, Radio Manufacturers Assn.

A DETAILED technical report on television frequency allocations as recommended by the RMA, was given by Mr. Murray, formerly with RCA in television research. He enumerated the basic television requirements as follows:

1. A single set of television standards for the U. S. A.

2. Frequency channels of adequate width, 6 mc., necessary for the transmission of high-definition pictures—pictures which experience has shown possess sufficient detail to afford sustaining interest — pictures which will approach the quality of home movies.

A channel of 6 mc. wide, from the viewpoint of the radio telephone engineer, seems very broad, broad enough for say, 300 telephone conversations, but if we are to have pictures of satisfactory detail this is the minimum channel width the Federal Communications Commission can assign.

3. Television, with its accompanying sound, should be in that portion of the ultra-high frequency spectrum best suited to this service (the 42-90 mc. region). This band must be wide enough for a sufficient number of channels to permit the simultaneous broadcasting of a reasonable number of programs in a given territory.

4. The television frequency band, or bands, should be as continuous as possible because of the convenience this affords in tuning, and because this permits the design of simpler, cheaper home television receivers.

5. A space in that experimental region above 120 mc. for television relaying, pick-up work and expansion. This space is to be shared with other services until that time arrives when, in the opinion of the Commission, definite assignments should be made. Then there will be required the allocation of a continuous band wide enough for a sufficient number of channels for future television service.

He called high-definition television in the laboratory "a reality". Television, he predicted will be supplementary to, but not take the place of sound broadcasting, and some day will win a place of importance in our national life approaching that of present-day aural broadcasting. When it reaches the commercial stage, he declared, it will form the basis of a new industry, producing television equipment in factories and producing programs in studios, entailing the hiring of thousands of workers.

A summary of ten items contained in the RMA recommended standards, all of which were elaborated upon in the report, was given by Mr. Murray, as follows:

1. Frequency allocation — Lower limit, 42 mc.; upper limit, 90 mc.; an experimental band starting at 120 mc.
2. Channel width—6 mc.
3. Spacing between television and sound carriers—3.25 mc. (approx.).
4. Relation of sound carrier to television carrier — Sound carrier higher in frequency.
5. Polarity of transmission—Negative.
6. Number of lines—440-450.
7. Frame frequency—30 per second; field frequency, 60 per second, interlaced.
8. Aspect ratio, 4:3.
9. Percentage of television signal devoted to synchronizing signals—Not less than 20%.
10. Synchronizing signal — No recommendation — ("Serrated" vertical signal favored by RCA; "narrow" vertical signal favored by Philco, Hazeltine, Farnsworth, General Electric Co.)

Concluding, Mr. Murray said as far as channels of 6 mc. in width are concerned, there can be no compromise.

Summary of

General Status of Radio Spectrum: 10-42,000 kc.

As of June 1, 1936

Class of Station	Total No. of Licensed Stations[1]	No. of Exclusive Frequencies[2]	No. of Shared Frequencies[2]
Aeronautical	210	0	69
Aeronautical Pt-to-Pt	96	26	16
Aircraft	473	2	76
Airport	24	0	1
Aviation[3]	23	0	4
Broadcast (550-1500 kc.)	630	90	0
Coastal Harbor (Telegraph)	31	3	15
Coastal Harbor (Telephone)	8	0	1
Coastal Telegraph	62	120	24
Coastal Telephone	3	4	2
Experimental Broadcast	15	0	25
Facsimile Broadcast	8	0	4
Fixed Public Press	76	45	5
General Experimental (Research only)	181	12	12
Government	[4]	528[4]	81[4]
High Frequency Broadcast (Apex)	32	0	4
International Broadcast	11	20	1
Marine Fire	2	1	0
Marine Relay	42	2	144
Mobile Press	5	11	0
Motion Picture	4	0	5
Municipal Police	1125	9	14
Obstruction Marker Beacon	4	0	4
Pt-to-Pt Telegraph	325	257	40
Pt-to-Pt Telephone	48	45	15
Relay Broadcast (formerly broadcast pickup)	186	8	12
Ship (Harbor)	36	7	0
Ship (Telegraph)	1974	42	25
Ship (Telephone)	4	1	1
Special Broadcast (1500-1600 kc.)	4	2	3
Special Emergency	83	1	5
Special Experimental (research only)	139	0	213
State Police	79	9	11
Television	18	0	0
	6111	1249	843
Amateur	46598	231[5]	

[1] The stations operating under the exceptions of Rule 320 are included in these classifications.
[2] Includes frequency range from 10 to 42000 kc. only.
[3] Aeronautical, aeronautical pt-to-pt, and aircraft operating on frequencies above 30000 kc. only.
[4] Total number of Government stations available by sub-bands only. Frequency date is for band 10—28000 kc. only.
[5] Channeling system (Rule 228) does not apply to frequencies above 28000 kc.

AMERICAN RADIO RELAY LEAGUE

THE American Radio Relay League, national association of licensed transmitting amateurs, made an extensive presentation through its general counsel, Paul M. Segal, employing as witnesses Kenneth B. Warner, managing secretary; Francis E. Handy, communications manager, and the associate editor of *QST*, Ross A. Hull, who illustrated their representations with a series of large colored charts.

Mr. Segal first briefly sketched the historical background of amateur radio in explanation of the nature of the "ham" institution. He then put on the stand Mr. Warner who asserted that the national policy of encouraging amateur radio had richly repaid the nation. He cited the vast training-school value of amateur radio and the fact that it supplied the majority of the executives, engineers and operators for the industry and the art.

He particularly emphasized its value as a reservoir of trained operators available for national defense, pointing out that the communication needs of modern defense arms are prodigous and that the great number of skilled amateurs in this country—in the neighborhood of 45,000—assured the military and naval forces of an adequate answer to what otherwise would be a most difficult problem.

Mr. Warner also stated that amateurs had made many technical contributions to the advancement of the art and asserted that much of America's dominance in radio technological advance flowed from the amateur influence. Perhaps his chief claim for the service value of amateur radio was the emergency communication it supplies when other forms of communication are disrupted, as in cases of floods, hurricanes and other emergencies. The vast numbers of amateurs and their widespread distribution, and their ingenuity in establishing communication under the most adverse conditions, he said, assures every community the ability to have its plight reported and assistance started.

Crowding Claimed

MR. HANDY reported the present operating status of amateurs, explaining their frequency assignments and the chief uses made of their various bands. He stated that congestion was now so severe that amateur stations were "six deep" throughout their bands, demonstrating that in their more popular bands the amateur transmitters sometimes were as closely packed as 200 to 400 stations per FCC telegraph channel of 0.1% width. Despite the use of most selective receivers their interference is now so great, he said, that they are being seriously handicapped in supplying their aids to the art and the public. To make the most effective contribution to American life, he asserted, it was desirable that two of their bands be expanded: Their "80-meter" band to the figures 3500-4500 kc. and their "40-meter" band so that it would run from 7000 to 7500 kc.

Mr. Handy made it plain that his organization recognized that this hearing was not dealing in frequency allocations in this part of the spectrum and said he was not filing a specific request for these frequencies, but rather was reporting upon their situation and disclosing that a need for more frequencies existed.

Space for Amateurs

HE SAID that the amateur organization had surveyed the commercial activity in the region of 7500 kc. and had concluded that more space for amateurs was available there from the engineering point of view. Admitting the existence of political and administrative difficulties to such expansion, he said that amateurs nevertheless had come quite firmly to the conclusion that questionable engineering practice was being followed by the commercial communications services of the world, and that if sound engineering considerations could be made to govern, there could be additional space for the "hams" without injury to other services.

Mr. Hull has been a prominent worker in ultra-high frequency research in recent years and reported for the Commission's information the work of amateur investigators in this field. He described the results of a two-year program of automatic recording of 60 mc. signals over a path from the Blue Hills Observatory of Harvard University to W. Hartford, Conn., a distance of 95 miles embracing four "optical horizons". It was commonly believed, he asserted, that consistent communication over such a path was impossible at such frequencies, but he had found only five days in two years in which communication failed. The transmission took place, he asserted, by virtue of a little-appreciated mode of propagation, namely, bending of the waves in the lower atmosphere. He called these waves "air waves", as contrasted with the well-understood sky wave and ground wave.

It was Mr. Hull's point that, while numerous surveys have been made of the coverage that can be secured by "apex broadcasting" and other uses of the ultra-high frequencies, inadequate consideration had been given the interference possibilities of these waves. He asserted that there were frequently conditions when the signals of Boston stations of low power, a hundred miles away, drowned out the signals of local Hartford amateurs within a mile or two of the receiving location.

He also reported that, on sev-

eral occasions in the last year, scores of East Coast amateurs using their 60 mc. band had communicated with scores of similar amateurs in the middle states, by virtue of sky-wave transmission, and predicted that such long-distance transmission on the very short waves would become increasingly frequent the next few years, due to the operation of the 11-year solar cycle.

Mr. Segal then put Mr. Warner back on the stand to adduce the amateur attitude towards the proposal that they give up their 5-meter band to television. Mr. Warner pointed out that amateurs had been assigned that band since 1924, had intensively occupied it, and he felt that they had demonstrated their ability to develop interesting technical information from their investigations of it. He asserted that the amateur group regarded the band as a valuable part of their family and that they could not contemplate giving it up or moving it. As to their own future in the ultra-high field, Mr. Warner renewed the request of the amateur organization that their service be assigned the band of frequencies from 112 to 120 mc., as a logical continuation of their "harmonic family" which already embraces a 10-meter band and a 5-meter one. Amateurs are entitled to modest "test slices" throughout the high-frequency spectrum, he asserted, and there is every reason to expect continuing results to the art from such assignments to the eager and inquiring amateur experimenters.

Dr. Frank Jewett
President, Bell Laboratories

BY CONTRAST with the decidedly bullish attitude toward radio's future opportunities expressed by Mr. Sarnoff. Dr. Jewett, speaking extemporaneously, frankly asserted that he "leaned to the side of conservatism". He urged extreme caution in drawing up new rules and regulations, declaring that the shortwave radio art is still uncertain and embryonic.

Dr. Jewitt declared that, so far as knowledge of the lower end of the spectrum is concerned, we can proceed with a fair degree of certainty, but that the high spectrum gets us into "uncertain and highly speculative realms". If we fix hard and fast rules now, he cautioned, we may find ourselves entirely wrong, may run into factors completely unknown or so sketchily known as to be risky.

Dr. Jewett said he was "shocked" by Dr. Dellinger's statement as to the needs of the government as against commercial interests. Any such rigid allocations as the government proposes, he said, would be very questionable in value to American society unless the greatest possible use by the government could be shown.

The Bell Laboratories chief saw a threefold need for radio services beyond what the wires already offer, namely (1) linking distributing systems over great stretches such as oceans, (2) extension of services to mobile carriers, such as ships and airplanes, and (3) emergency or temporary uses to cover difficult stretches of terrain.

A CSBS ANNOUNCEMENT OF PROGRESS

The Mountain Goes To Mahomet

The Studio Goes To The Scene

THE MIKE TAKES TO WHEELS

Once again, The Central States Broadcasting System—KFAB, KOIL, KFOR—pioneers with the FIRST Mobile Broadcasting Unit in Nebraska and Iowa. Another FIRST for stations that have always been leaders in radio broadcasting in the middlewest.

CENTRAL STATES BROADCASTING SYSTEM

KFAB-KOIL-KFOR

Omaha — Council Bluffs — Lincoln

WFBL

Let Us Send You an Audition..

Judge in Your Own Office what you will get over the air in Syracuse

With our new transcribing equipment we can make it possible for you to hear EXACTLY how your program will sound on the air. We can send you a record of the most popular local program with its ready-built audience. Or we will build you a program to your needs and send you a recorded audition. Also, if you are now running a program in Syracuse we can reproduce it directly from a broadcast so that you may hear it as it is. This is a service you can profitably use if you are using or going to use radio in Syracuse.

5,000 watts days; 1,000 watts nights.
Full Columbia service.
Competent program department.
Complete merchandising service.
Trained selling announcers.
Seasoned radio organization.

ONONDAGA RADIO BROADCASTING CORP.
SYRACUSE, NEW YORK

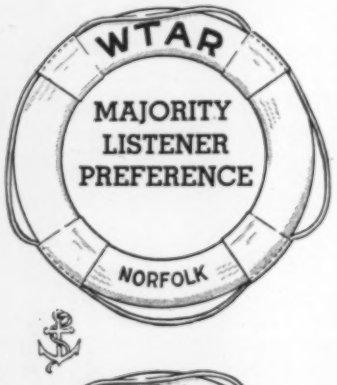
MEMBER BASIC NETWORK COLUMBIA BROADCASTING SYSTEM

National Representatives: RADIO SALES, INC.
New York Detroit Chicago

"Rule of 3" for Radio Space Buyers Found by Station WTAR

New "Copy Angle" Will Prove Big Help in Planning Effective Radio Sales Campaign

STATION WTAR, NBC Outlet in Norfolk, Va., completely satisfies all requirements of the radio space buyer for insuring complete money's worth of every dollar spent for time on a station. Set forth as the "life preservers" of the time buyer are three major factors in choice of stations.



Majority Listener Preference

THE FIRST RULE is a sure sign of sales receptivity . . . and so rare it makes WTAR a "must" for any well coordinated campaign. Recent Ross Federal coincidental survey gave WTAR 54.24% of total listeners at all hours on all stations reaching into the rich Tidewater Virginia market of Norfolk, Portsmouth and Newport News.

High Per Cent of Contract Renewals

CERTAIN SALES SATISFACTION makes WTAR just as highly prized as an integral unity in the sales campaign as does majority listener preference. 86% of contracts for the products using time over WTAR during last twelve months have been renewed and many of the advertisers have come back time after time.

Compact Metropolitan Market

300,000 POPULATION within 20 miles of transmitter gives WTAR a responsive market that is easily and quickly merchandised. Balanced industrial activities coupled with surrounding agricultural region give an unusual opportunity for year round sales in the Greater Norfolk market. Most of population is urban and 97.3% of homes have radios.

EDWARD PETRY & CO.
National Representatives

COMPLETE NBC SERVICE

WTAR

★ ★ NORFOLK ★ ★
VIRGINIA'S OLDEST BROADCASTER

A. H. Kirchhofer
WBEN and W8XH, Buffalo Evening News

A VALUABLE field in the ultra-high frequency range was seen by Mr. Kirchhofer, vice president of WBEN and managing editor of the *Buffalo Evening News*, for localized broadcasting either to supplement the present broadcast service or to allow smaller communities now without their own service to enjoy local radio facilities and for facsimile broadcasting of news reports to especially interested classes, somewhat similar to stock ticker service. Mr. Kirchhofer stated that his station had been conducting ultra-high experimentation since 1932, first on 51,400 kc. and recently on 41,000 kc. and, while the tests have not completely solved all problems, the most useful data is the clarity and generally satisfactory reception throughout a local territory without skip distance effect. He suggested 41 megacycles as a good point for this localized high-frequency broadcasting.

There is no danger that facsimile transmission of news will replace newspapers, he stated. He thought, however, that it had a place as a special limited and selective service, preferably functioning simultaneously with broadcasting so the listener could tune to both facsimile and broadcasting. He suggested facsimile could be placed on a scheduled basis for transmission of broadcast news reports received too late for the morning newspaper and too late for the afternoon newspaper, as a supplementary news report for the newspaper. He urged that the FCC grant channels for continued experimentation, but that if the experimenters prove themselves able and have a qualified service of public benefit they be given an opportunity to launch the service commercially on the ultra-highs.

William J. Scripps
Stations WWJ and W8XWJ, The Detroit News

ON BEHALF of Mr. Scripps, who had to leave the conference before called upon, Stuart Bailey, of the consulting engineering firm of Jansky & Bailey, Washington, described the progress made by the *Detroit News* in its experiments with an "apex" station. Because measuring instruments are unavailable, it is difficult to take exact field measurements of signal intensity, it was brought out, but the newspaper's experimenters have determined that 5,630 receiving sets have been sold in Detroit since W8XWJ went on the air that are capable of tuning in its signals, and he estimated at least several thousand more are being used that were home made.

Mr. Scripps' paper expressed the hope that allocations above 1500 kc. would be made for radio-type services to be used in news gathering, for facsimile and for relay broadcasting or pickup services—all of which, it was stated, would greatly aid in the functioning of a newspaper. The Scripps paper was in the nature of one of the first reports on "apex" operations submitted to the FCC since these frequencies began to attract such widespread interest.

The Right Approach

Whether you're selling a product, soliciting funds for a community chest, or just trying to join a golf club, the right approach is essential.

There is only one "right approach" to Savannah's radio listeners. It's the station they regard as their own. It's the one they listen to consistently. It's the one that gives them best reception.

That station is

WTOC

SAVANNAH, GA.

COLUMBIA SOUTHEASTERN GROUP

National Representatives
THE PAUL H. RAYMER CO.
Chicago New York San Francisco Detroit

R. D. Lemert
V. P., DeForest Television Corp., Los Angeles, Cal.

SOME startling claims were made by Mr. Lemert on behalf of his company and its president, Dr. Lee DeForest, noted inventor of the vacuum tube, and he promised to demonstrate them if FCC engineers would visit the company's laboratories. First, he claimed perfection of a high-speed facsimile system now ready to be introduced which, he said, will transmit from 240 square inches per minute at slow speed to 600 square inches per minute at normal speed, using a frequency band of 30 kc. with single side band transmission.

Secondly, he described a new "theater television" service as follows:

"The theater television utilizes a new and basic principle in which a new non-photographic film is used and upon which a high-definition television picture is electrically engraved just prior to projection; that is, the film is run at its regular speed of projection and the picture is electrically engraved and projected upon the full-size theater screen 18x24 feet in less than one-quarter of one second.

"The frequency required for this type of service will be approximately 4,000 kc.—the picture having approximately 400 lines. It is possible in this particular field to televise any scene at a distant point and through the medium of inter-linked broadcasting project the scene being televised upon the screens of all theaters which are equipped with this type of reception apparatus and utilizing the standard projection equipment."

As for home television, the third service Mr. Lemert promised from his company's laboratories, he described a "new and revolutionary" mechanical system of scanning and a receiver "capable of projecting a three-foot square picture with a definition of two million picture elements." Although this definition is considerably higher than that contemplated by other companies, he added, it is possible to transmit such a picture for home use utilizing side-band transmission. The sets, he said, can probably be sold to the public for not more than $200.

Mr. Lemert recommended that for facsimile and television, the FCC set aside the 40 to 110 mc. band, and stated that his experience was 60 to 110 mc. is the most valuable. Although the claims made for the DeForest services exceeded those of all others by far, Comdr. Craven did not cross examine Mr. Lemert at much length beyond securing an assurance from him that the FCC's chief inspector on the Pacific Coast, V. Ford Greaves, would be permitted to see these developments in view of the inability of Comdr. Craven and any of his Washington staff to visit Los Angeles in the near future.

Edwin H. Armstrong
Professor, Elec. Engineering, Columbia University

THE REVOLUTIONARY frequency modulation system of broadcasting, as opposed to amplitude modulation now used, was demonstrated by Prof. Armstrong, inventor of the superhetrodyne, regenerative and super-regenerative circuits. Asking that facilities be left open in the ultra-high bands for frequency modulation, he had performed a number of recordings which revealed the difference in quality between amplitude and frequency modulation emissions, the results of which were almost amazing.

Prof. Armstrong said his experiments with a station in New York disclosed reception far beyond the line of sight. While his frequency modulation method demands band-widths ten times the width used for amplitude modulation, he said that not only the increased quality but the greatly increased primary coverage of stations justifies its use in the ultra-high bands.

Of significance, he brought out in reply to a question by Horace L. Lohnes, Washington attorney, is the fact that stations can be placed on the same wavelength with greatly reduced separations. Whereas a 1,000 mile separation now is required for stations of 1,000 watts on the same channel, he said he would not hesitate reducing this separation to 100 miles or even less.

Questioned by Chief Engineer Craven, Prof. Armstrong said his system is not proposed for the regular broadcast band since it would mean that perhaps only 10 stations could be accommodated in the entire range from 550 to 1600 kc. In the ultra-highs, however, he asserted, there is ample space available for the high-quality service which frequency modulation would render.

It is thought by some engineers that frequency modulation may prove greatly beneficial to facsimile as well as sound broadcasting. First, by eliminating background noises and other interferences, distortion in picture transmission would be greatly reduced and the "fuzz" that appears to bother facsimile would be remedied. Moreover, the Armstrong method overcomes atmospherics which have proved troublesome on the ultra-highs, and would make for greater reliability of transmission.

The recordings demonstrated by Prof. Armstrong indicated a reduction in background noises and interference with frequency modulation to a degree of 100 to 1, it was estimated, whereas in amplitude modulation the ratio is about 2 to 1 on the ultra-highs. Spark plug emissions and other man-made disturbances appeared to be entirely absent.

Prof. Armstrong agreed under questioning by Chief Engineer Craven that his system raises an economic problem of severe consequence, because of the wide band of frequencies required. He maintained, however, that the "superior" service, in his opinion, justified the wider bands.

[An article by Paul Godley, radio engineer, describing the Armstrong frequency modulation method, is published on page 72 in this issue.]

KFEL-KVOD
— Denver's —
NEWS SERVICE
— STATIONS —
•
Gene O'Fallon, Sales Mgr.
Suite No. 2340A, Stevens Hotel

LIKE *a* HEN *with* ONE CHICK

You'll think that *your* account is the *only one we have* !

• Whether you use spot announcements or an hour's program, WIBW watches over your account with all the anxiety of a hen with just one chick, because it ***must*** produce results.

• A station executive immediately assumes full responsibility for such satisfactory results. He personally supervises the selection of the best time and audience for your message . . . the proper announcer . . . music or entertainment with proven appeal to those you wish to reach . . . checking response . . . always seeking improvement. Assisting him are WIBW's experienced merchandising staff, program and publicity departments.

• We know our market! WIBW serves Kansas in the Kansas manner. We're "home folks" and are welcomed into every family circle in the state. That's why you must use WIBW to reach Kansas.

• Let us carry your message into these same homes and *earn* a permanent place on your sales force. We'll begin with a daily message, six times a week for a whole month, at a cost of only $150. Phone, write or wire our nearest office for details of this low-cost, productive, "personalized" sales plan.

WIBW—Topeka—"The Voice of Kansas"

Owned and operated by The Capper Publications—Don Searle, Gen. Mgr.

Represented by Capper Publications in

New York—Chicago—Kansas City, Mo.—Cleveland—Detroit—San Francisco

Here Is A "SISTER ACT" that will knock you cold!

USE KFYO, Lubbock, in combination with its sister station KGNC, Amarillo, and

Get 75% DISCOUNT ON KFYO RATES

For Two More Months Only!

This startling, try-out offer is made to demonstrate the tremendous pulling power of KFYO in the rich Lubbock market.

KGNC, Amarillo - KFYO, Lubbock BLANKET Northwest Texas!

IN record time, KGNC at Amarillo has achieved remarkable results for Amarillo market radio advertisers! Now KFYO at Lubbock, Texas is under the same ownership and management—and blankets thoroughly and almost exclusively the fertile, prosperous market immediately south of the Amarillo market. The two stations together provide complete coverage of Northwest Texas.

We want to prove by results what these two stations in combination will do for advertisers—so, for a limited time, we offer time on them in combination at the KGNC Amarillo card rate, plus 25% of the KFYO Lubbock card rate. Here is a bargain and an opportunity! Cotton crop prospects in the Lubbock market are the best in four years, even though last year's crop totaled $15,000,000. Conditions in the Amarillo market are likewise excellent. So act quickly—while desirable time is yet available! Complete market analysis on request.

KGNC
AMARILLO, TEXAS
The Globe-News Station
2500 w. day, 1000 w. night
1410 K. C.

KFYO
LUBBOCK, TEXAS
The Avalanche-Journal Station
250 w. day, 100 w. night
1310 K. C.

WILSON, DALTON, ROBERTSON CO.
Exclusive Representatives
Kansas City Chicago New York

John V. L. Hogan
W2XR, Long Island City, N. Y.

CONSTRUCTIVE suggestions on the future regulation and supervision by the FCC came from Mr. Hogan, ranked as one of the great inventors of American radio, who gave his views on high-fidelity broadcasting, television and facsimile in the ultra-high frequency spectrum. High-fidelity broadcasting has become an accepted and satisfactory medium for the public, Mr. Hogan declared in urging that the FCC consider the necessity in the public interest of continuing high-fidelity stations in 20 kc. channels with higher power and greater separation. He proposed that five bands be made available in the 37 to 42 megacycle range for high-fidelity broadcasting but noted that more work and research should be concentrated on propagation and noise problems. These stations would become the basis for high-power stations which would blanket the rural sections of the nation. He cited new plant of WOR as an example of high-fidelity broadcasting to produce greater realism in this field.

On television, Mr. Hogan, whose testimony was heard with close interest by FCC engineers, brought out three points. First, he agreed with elimination of the medium frequencies for television experimentation not only to give a place for other services but because high-definition can be obtained only by using ultra-highs. He did not feel that the argument of rural coverage through the medium frequencies would be a practical service when the art was really being developed on the ultra-highs. Second, he urged standardization and promulgation by the FCC of any standards agreed to by the industry. But he believed that the FCC should not try to force rules on the industry without the latter's acceptance because it would restrict television.

Avoiding Expense

MR. HOGAN said that detail in definition should not be given too major a role and that the ambition should not be to equal the motion picture screen. He suggested that closeups could be used frequently and that the program makers for television could not plan their work for too expensive a technical system. Too much detail, he added, involves waste of channel space and is costly for terminal apparatus. He proposed two types of television service—one of moderate definition and less expensive and the other of high definition.

For facsimile he believed that the goal now should be to seek cheaper apparatus and speed of transmission. Facsimile was classified as an associate of sound broadcasting with its reproductions accompanying broadcast programs in the form of speeches, texts, songs, music scores and educational matter or it can be an independent or self-contained system. On point-to-point facsimile he said he was cooperating with Press Wireless and this field could use any channel capable of continuous waves such as telephone modulation at high speed. For facsimile broadcasting he thought it could accompany high-fidelity broadcasting and the 37 to 42 megacycle band was available for both with segregation between the two services. He did view facsimile as possibly growing more rapidly in the ultra-highs than sound broadcasting. The new services of the ultra-highs must be fostered, he urged.

The FCC might also provide a number of 4 kc. bands for facsimile in the 1580-3000 kc. range, he said, as there was no limitation on the quality of those bands for this field but there could not be coordinated sound broadcasting and facsimile in the lower frequencies. He pictured a facsimile reproducer of $25 or $50 which could be added to the sound broadcast receiver and besides aid in rural coverage. He said that he was projecting a field demonstration soon in this service and predicted that facsimile would be a new industrial development in information dissemination rather than entertainment.

Denver Listens!
KFEL - KVOD
NEWS SERVICE

Donald K. Lippincott
Patent Counsel, Farnsworth Television Inc.

THE cathode ray method of television has won recognition as the best present-day medium of visual broadcasting, not only in the United States but in the leading European nations, according to Mr. Lippincott. Besides RCA and Farnsworth in this country, England, Germany, France and Holland all have probed other media and found the cathode ray the most feasible. "A trend supported by so much evidence is rarely reversed as the art progresses," was a significant remark of Mr. Lippincott.

Television will never be controlled by one group, he continued, as there are so many patents. How the control of the major patents is divided awaits pending decisions of the U. S. Patent Office. He discounted the "spectre of monopoly" and stressed that royalties would have to be paid to any inventor. He concurred in the RMA standards and thought the FCC should establish such standards, but warned that a certain flexibility in any regulations should be allowed or the art of television might have to be returned to the laboratories to meet any excessively rigid requirements.

Farnsworth has endeavored to adopt a broad licensing policy so broadcasting stations could inaugurate television where the art primarily belonged, he stated. Several broadcasters are ready to launch commercial television service and Farnsworth has a number of such applications, he said. "The audience is now ready and the public is getting impatient," he claimed. "The size of the audience depends on the quality and future developments but the art should meet their anticipations."

REVENUES totaling around $18,750,000 are now shown by the British Broadcasting Corp., with something like 8,000,000 radio licenses issued at the $2.50 annual fee.

Joseph Pierson
President, Press Wireless, Inc.

THE STRIDES of Press Wireless Inc., a cooperative radio news distributing organization which was organized in 1929, was described by Mr. Pierson. "Almost phenomenal progress has been made," he said, "in the use of radio for handling of press dispatches from many countries."

"Much remains to be done to complete the press-radio program," he said. He indicated that Press Wireless may ask for a few more frequencies, probably in the 2700 kc. band and between 8,000 and 14,000 kc. as well as some in the ultra-high frequency range. "Impending news services being developed," he said, "include radio telephoto systems which will surpass in speed and definition existing cable and radio telephoto systems, facsimile, and television.

"Within the next few years, we expect to implement the newspapers and other news distributing agencies of America with special television service of public information and educational nature." Apropos of facsimile, Mr. Pierson said:

"With our facsimile system we propose to widen the field of news distribution through economy, to speed up news delivery beyond the standards of the prevailing wire printer system, and to make such delivery more accurate since the news appears at point of delivery without intervening human relay. We propose to provide the news profession in its various localities throughout the country with a method to supplement their present forms of publication which will deliver a record news or educational report for them direct to their public. Our telephoto system will be linked in closely with our facsimile system as developed and also will be employed to improve the speed and economy of domestic photo delivery."

Mr. Pierson urged that the FCC, in considering ultra-high allocations, go slowly. He said he was strongly in favor of a year's limitation being placed on the time a license may be held before delivery of the licensed service to the public. He criticized the government demand for more than half of the ultra-high channels. "It seems to us," he said, "that the trees in the forest should be made to wait until human society has been serviced." Referring to the government demands, Mr. Pierson proposed that the President be invoked to give the FCC complete control of the ultra-high frequencies "so that people will get something out of it before it is frittered away either on chain regimentation or on trees and the love-life of the bull frog."

He asked for one television channel six megacycles wide for Press Wireless, leaving the specific assignment to the FCC. He estimated the Press Wireless need for ultra-high frequency channels for telegraph, telephone and facsimile at 11, each 100 kc. wide, distributed between 42 and 110 mc. Throughout his statement he referred to alleged monopolistic tendencies of RCA.

Lawrence C. F. Horle
Engineer for Radio Manufacturers Assn.

AN EXPLANATION of the RMA recommendations for ultra-high frequency broadcasting and for facsimile, was covered by Mr. Horle, who emphasized the need for additional frequencies for broadcasting use. Specifically, he recommended the allocation of the band between 37 and 42 mc. for additional broadcasting assignments, both aural and facsimile, with a frequency separation of 40 kc. Moreover, he suggested that the assignments in this band in the same geographical area be made with frequency separations of 200 kc. to avoid interference.

As to facsimile, Mr. Horle recommended transmission be eligible on all frequencies on which aural broadcasting is permitted, with facsimile as an "adjunct" service. He referred particularly to midnight-to-morning service on all regular broadcast assignments. In addition, the RMA recommends that assignments on a "primary service" be made in the 37 to 42 mc. band, but in the lower end of the band, possibly between 37 and 38 mc., and that the remainder of the band be devoted exclusively to aural broadcasting.

If the bands recommended were allocated for ultra-high broadcasting, Mr. Horle declared under questioning by T. A. M. Craven, FCC chief engineer, there conceivably could be 125 ultra-high frequency assignments in a single area.

Albert L. Colston
Brooklyn Technical High School

MR. COLSTON said that television would permit use of "master teachers" and bring "master blackboards" into the 700-odd schools of the largest city and before more than a million students simultaneously. He urged that one television channel be reserved for his school, when such should be authorized by the FCC.

Isaac Brimberg
New York City Administration

"BLIND DOCKING" of watercraft by radio beams similar to those now used by aircraft was favored. Mr. Brimberg said that fog and low visibility cripple the immense water traffic at New York City and asserted that millions of dollars could be saved by operating with radio beams.

H. L. Cornell
American Steamship Owner's Assn.

A PLEA for the recognition of the "grand daddy" of radio—the marine services—was made by Mr. Cornell, who stressed the growing importance of shortwave communication for ships and asked the reservation of channels in the 30 mc. bands for future use aboard ships. He felt that particularly the ultra-highs were feasible for short-distance radiotelephone in harbor activities.

SUCH COMMENTS MUST BE DESERVED!

Here's What The Advertising Agencies Say About The Newspaper Promotion Given Their Clients!!

"Very fine type of co-operation which should help to enlarge our listening audience." N. W. AYER & SON, New York.

"Splendid promotion on your part, we appreciate your co-operation." CAMPBELL-EWALD COMPANY, Detroit.

"Let us congratulate you and say we think this is excellent co-operation." WILLIAM ESTY and COMPANY, New York.

"This type of co-operation on your part is very constructive." MATHASON ADVERTISING CO., Philadelphia.

"The Sponsor and this office will see that WFIL gets full credit for this co-operation." JOSEPH KATZ COMPANY, Baltimore-New York.

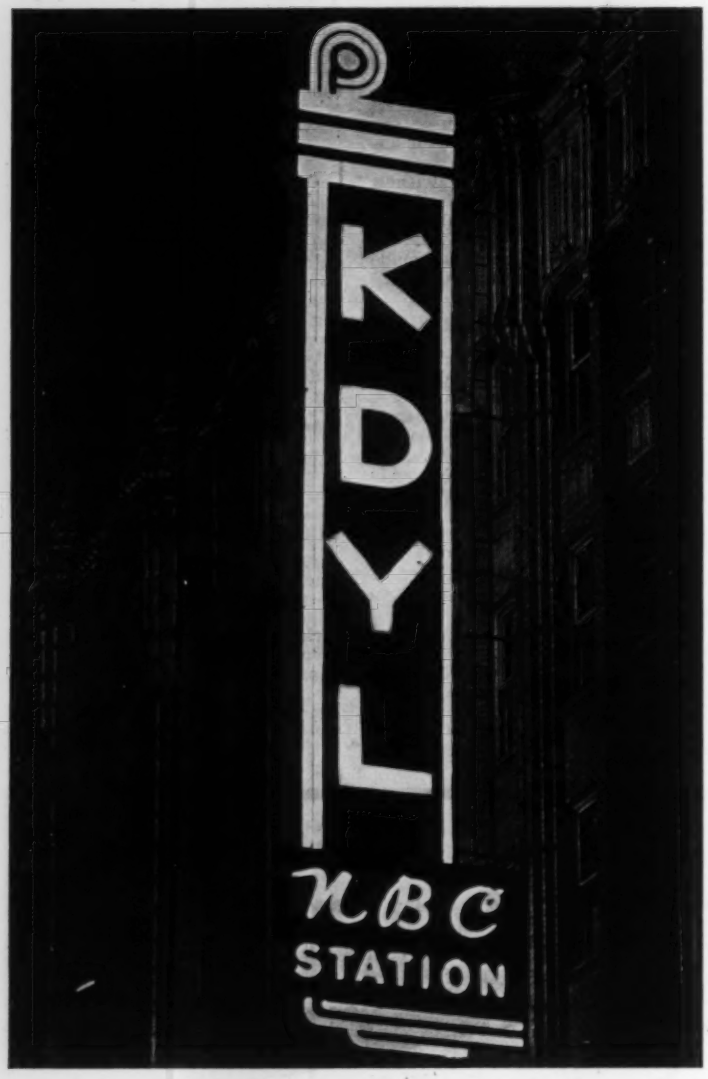
"We want to compliment you on behalf of our client for this excellent service and co-operation." DONAHUE & COMPANY, New York.

WFIL

560 KC

The Fastest Growing Station in PHILADELPHIA

SALT LAKE CITY



TOPS

. . . in SHOWMANSHIP

. . . in RESULTS IN SALES

•

That's Why Advertisers Say:

"KDYL brings 'em
in to buy!"

•

Representatives

JOHN BLAIR & COMPANY

CHICAGO • NEW YORK • DETROIT • SAN FRANCISCO

Oswald Schuette
President,
Short Wave Institute of America

THE FCC was urged by Mr. Schuette to give the international shortwave situation careful consideration in the preparations for the Cairo Conference. He thought that in future ultra-high assignments the Commission should give precedence to "mass communication" broadcasting services, including television, above the individual point-to-point services because of their greater public interest. He opposed the allotment of over half the ultra-highs to the government and urged the FCC to put pressure on the services for multiple use of the separate frequencies. He viewed television as "a promise of the future" while the immediate need for expansion was in shortwave broadcasting.

Mr. Schuette also felt that shortwave could serve an excellent purpose in the United States in broadcasting daytime programs to rural sections where standard broadcast programs were not well received. He advocated the doubling of American international programs to present the true picture of this nation to foreign countries, stating that many leading European powers were sending excellent news and educational programs throughout the world and the United States should enter this field to a greater extent. He felt that the FCC should waive its rule about banning commercial programs on American international broadcasting to stimulate this field. FCC Counsel Bauer asked Mr. Schuette what the membership of the Institute was but the Institute head said that since he was giving his own views, not those of the Institute's membership, such information was not pertinent in the case.

Another shortwave spokesman, Walter S. Lemmon of the World-wide Broadcasting Corp., Boston, urged the extension of shortwave broadcasting by educators.

Emile Gough
Vice President,
Hearst Radio Inc.

MR. GOUGH, reading a paper originally prepared for delivery by T. J. White, head of all the Hearst enterprises, urged the FCC to give careful consideration to those who have already done pioneering experimental and developmental work in radio, particularly in the field of news distribution. He cited in detail the widespread uses of radio by the Hearst organization, which he asserted has invested at least $1,000,000 in radio communications services other than broadcasting.

Besides the eight broadcasting stations owned by Hearst interests, Mr. Gough told of the "multiple address" long and shortwave printer radiotelegraph service to newspapers being developed under Hearst auspices; his company's shortwave circuits already carrying tens of thousands of words between various cities; and various other radio enterprises of the organization.

Allocations, said Mr. Gough, should be made first to those with adequate experience and those prepared for further development.

That State called North Carolina

Recognized as the South's premier market place . . . with "above-the-average" demand for practically all classes of merchandise . . . with "above-the-average" buying power . . . North Carolina deserves your closest advertising and sales attention.

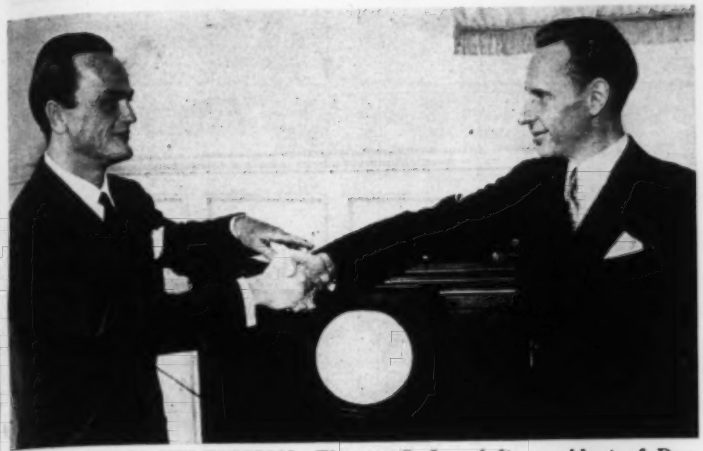
National advertisers, and local as well, have simplified the problem of gaining and maintaining acceptance for their products in North Carolina by using WPTF, the popular, far reaching NBC station.

Located in the Capital City between the famous Piedmont section and the rich agricultural East WPTF serves over 150,000 North Carolina homes, with a liberal listener bonus in surrounding areas.

Write Free, Johns & Field, Inc., or
direct for booklet and coverage map.

WPTF

RALEIGH NORTH CAROLINA



FIRST PUBLIC TELEVISION—Thomas S. Lee, left, president of Don Lee Broadcasting Co., congratulates Harry R. Lubcke, Don Lee television director, on the occasion last month of the first demonstrations to the public of the new 300-line high-definite cathode ray system via W6XAO in Los Angeles. The television image is projected on the fluorescent oval screen on the set, which is illustrated here.

Harry R. Lubcke
Director of Television, Don Lee Broadcasting System

MR. LUBCKE announced the opening June 4 of public demonstrations of Don Lee's 300-line cathode ray television in Los Angeles, which he said were the results of researches begun for that organization by him in 1930. He said that daily four-hour demonstrations of television are now being given at a "looking in" post in Los Angeles. [See June 15 BROADCASTING.]

Agreeing with the RMA, Mr. Lubcke urged channels of 6 mc. width, six to be reserved in the range from 42,000-84,000 kc. In addition, he suggested reserving three groups of greater channel widths, namely, six 8 mc. channels from 130,000-178,000 kc.; five 10 mc. channels from 300,000-350,000 kc.; and five 100 mc. channels from 3,000,000-3,500,000 kc.

"It is evident," he said, "that television channels should be arranged in groups, and that each group should contain five or more channels in order that the design of receivers may be simple and economical. Television channels should not be shared with other services. The aural channel for each visual channel should properly be adjacent thereto, although existing broadcast band transmitters constitute an already established channel for this purpose, which use should be allowed."

Mr. Lubcke pointed out the difficulties in securing scanning constants in a city like Los Angeles, with 60 and 50 cycle power. For that region, he said 24-frame sequential scanning appears to be the proper standard. He said 300 lines per frame was selected as a result of motion picture experience. This represents a precision, he said, within the grasp of the television art, adding that "the standard of 300 lines need not be exceeded if all other parts of the television system are brought, as they will be, to ultimate perfection."

TO CALL attention to its tenth anniversary, to be celebrated next November, NBC has had all its business stationery imprinted with the medallion featuring "A Decade of NBC Broadcasting".

Elisha Hanson
Counsel, American Newspaper Publishers Ass'n

MR. HANSON contended that specific periods during the day should be set aside by the FCC for the "news programs which are furnished stations by the newspapers and press associations to be broadcast without any connection whatsoever with an advertising program." He asserted that the Supreme Court had ruled on the property right of news and that the newspapers therefore had the right to have their news bulletins distinguished from advertising news broadcasts. After stating that newspapers were not fearing television and facsimile competition, he declared that the Commission should allocate channels on their merits and public interest, and if newspapers were the qualified agencies they should be given the facilities. He added that the ANPA had no specific recommendations on facsimile allocations as it felt that service was still experimental.

S. M. Kintner
Vice President, Westinghouse E. & M. Co.

ONE of the pioneers in radio engineering, Dr. Kintner traced the steps of radio development up to the time KDKA took the air in 1920 as the first regularly scheduled broadcasting station. He predicted that if the art is left open science will find more wave lengths in the upper reaches of the ether.

He urged the FCC not to fix allocations so solidly that they cannot be changed. The request of the Interdepartment Radio Advisory Committee that 60% of the available channels between 30 and 200 mc. be allocated for government use was opposed by Dr. Kintner on the ground that it would not be in the interest either of the government or the public. He said he thought the government would benefit more by leaving the development in the hands of private services so that in times of stress it could take over completely organized and developed services.

In Southern California

KFOX competes!

HERE IS PROOF

1392 Consecutive Broadcasts
Podolar Motor Co

1284 Consecutive Broadcasts
Crystal Ice Company

1260 Consecutive Broadcasts
Harris Fur Co

880 Consecutive Broadcasts
Thrifty Apparel Co

810 Consecutive Broadcasts
Staber's Beauty Shops

700 Consecutive Broadcasts
Barnett's Bootery

512 Consecutive Broadcasts
Walker's Optical Co

520 Consecutive Broadcasts
Stricklin's Radio Co

620 Consecutive Broadcasts
Richfield Oil Company

117 Consecutive Broadcasts
Chevrolet Motors

144 Consecutive Broadcasts
Richmaid Creameries

NO greater proof of the pulling power of a station could be obtained than that shown by the number of continuous, consecutive programs broadcast for the same clients. The remarkable records listed at the left are more convincing than any claims which could be made for the ability of KFOX to compete with any programs directed to one of the richest, most productive markets in the Nation.

1250 Kilocycles
Power 1000 Watts
Unlimited
Release

3,143,172
PEOPLE
IN THIS
AREA
(1930 CENSUS)

KFOX

For Rate Information and Available Time, Write or Telephone

Nichols & Warinner, Inc.
Commercial Broadcasting
Hal Nichols, President
L. W. McDowell,
Commercial Manager

220 East Anaheim
LONG BEACH, CALIFORNIA
Telephone 672-81

541 S. Spring Street
LOS ANGELES, CALIFORNIA
Telephone MUtual 2510

American Medical Assn.

TWO SPOKESMEN for the medical profession, Dr. H. B. Williams, of Columbia University, speaking for the American Medical Association, and Howard A. Carlson, secretary of the Council on Physical Therapy, pledged cooperation with the FCC in eliminating interference with the radio spectrum by the sporadic oscillations of electric diathermy and X-Ray machines. These medical devices have been transmitting harsh emissions which have been particularly disturbing to the upper bands.

Dr. Williams declared that the Medical Association has called upon all manufacturers of the machines to aid in shielding them from radio interference through filtering and shielding and anticipates good results. He asserted that the worst interference came from small communities where the power passes through pole lines as contrasted with underground.

Capt. D. S. Leonard
Communications Chairman
Int'l Assn. of Police Chiefs

ONE OF the "public interest" services, peculiarly adapted to radio, which has been to a large extent nurtured to its present high efficiency through the aid of the FCC engineering staff—police radio—was described by Capt. Leonard, of the Michigan State Police. He credited radio with being a weapon of immense value to law enforcement authorities in their battle against the nation's 20 billion dollar crime losses. The present state of police assignments with the growing traffic and the new intercity nationwide radiotelegraph network was said to be far from satisfactory and the FCC was urged to set aside 8 fixed transmitter channels, 10 mobile channels, 4 fixed for simplex and one special mobile for car-to-car work in the ultra-highs.

Paul Goldsborough
President,
Aeronautical Radio Inc.

REVIEWING the service of radio in aviation, he emphasized the needs, present and future of commercial aviation for additional frequencies in the ultra-high bands being thrown open. Assignment of long waves being used by aviation for broadcasting or other services was opposed.

Eugene Vidal
Director,
Bureau of Air Commerce,
Department of Commerce

AVIATION, more than any other form of transportation, is dependent upon radio for safety of life and property. The future of aviation commercially depends upon proper radio, and he urged the FCC and the other services to give full consideration to the radio frequency requirements of aviation.

Samuel E. Darby Jr.
Attorney
Representing Set Manufacturers

AN ATTACK upon RCA, alleging monopolistic practices in patent pooling, was launched by Mr. Darby as counsel for eight set manufacturers. He said the manufacturers included Philco, Crosley, American Bosch, Zenith, and Stewart Warner.

Mr. Darby asked that before assignments be made for television that something be done about patent pooling by RCA. Challenging the testimony of President Sarnoff of RCA concerning patent rights to set manufacturing licensees, Mr. Darby declared that RCA can refuse to permit use of its patents by set manufacturers under its form of contract. He asserted RCA collects some $4,000,000 a year in royalties from set manufacturers and thus far has realized approximately $50,000,000 from its patent pool which tribute, he charged, is collected by manufacturers from the public.

He urged the Commission to "consider the record" and admonished it not to "become a party" in assigning to RCA a "further monopoly". He alluded to the anti-monopoly plank in the Republican platform and declared that a similar plank might be adopted by the Democrats.

Frank W. Wozencraft
General Solicitor,
Radio Corporation of America

THE ATTACK by Mr. Darby upon RCA as a patent pool and as potential dominator of television in a patent way elicited from Mr. Wozencraft a brief statement in which he asserted that, since Mr. Sarnoff did not delve into private business matters, he saw no reason for argument before the FCC on private controversies in such a conference. He asserted that Mr. Darby's statement was "inaccurate and unfair". He said that what Mr. Darby seeks is free or unlimited licenses to use RCA patents, or a reduction for his clients in their royalty rates, and he insisted that this was no place to bring up the subject.

J. D. Durkee
Western Radio Telegraph

FOUR ultra-high frequency channels for radiotelephone to serve "outer fringes of society" in Oklahoma and Texas oil fields where Philips Petroleum Co. drills wells and explores oil-bearing regions, all sparsely settled, were asked. The company handles communications until wire companies step in after communities are settled in oil well towns.

Walter C. Evans
Westinghouse E. & M. Co.

MR. EVANS felt the FCC should relax a portion of the international broadcast rules to permit greater shortwave broadcasting in the United States. He claimed westerners liked to listen to eastern shortwave stations.

WE'VE NEVER HAD OUR AUDIENCE

Measured

but . . . OUR ADVERTISERS

Measured Us!

1934 — 102% INCREASE — 1935 — 66% INCREASE — 1936

★ Chevrolet Motor Co.
★ Ford Motor Co.
★ Colonial Oil Co.
★ Consolidated By-Products Co.
★ Dodge Motor Co.
★★★ 104 local clients.

For results for local advertisers (and, after all, why not for national sponsors, too?) it's virtually impossible to compete with a popular local station!

WGH — NORFOLK — NEWPORT NEWS — PORTSMOUTH — WGH

Bankers Trust Bldg. Metropolitan Bldg. American Natl. Bank Bldg.

Second Largest Metropolitan Area in Virginia

A wealthy half-million market awaiting your sales message

EDWARD E. EDGAR, Commercial Manager, Norfolk, Va.

E. ELLSWORTH BISHOP, General Manager, Newport News, Va.

Hampton Roads Broadcasting Corporation

Bell System

ESTIMATED requirements of the Bell System for radiotelephone circuits on a basis of growth of service were set at 98 new frequencies in the present assigned spectrum up to 30,000 kc., including 66 transoceanic circuits with 45 new paths across the Atlantic, and in the new 30,000 to 200,000 kc. range 16 frequencies were deemed feasible for public mobile service and a dozen channels for public fixed service with 40 circuits held free from allocation in the upper portions awaiting further marches of the art. These estimates were presented by Dr. Harold S. Osborne, transmission engineer of the American Telephone and Telegraph Co., for the present assignments and Lloyd Espenschied, radio transmission development director of the Bell Telephone Laboratories, for the ultra-high range. Edward L. Nelson, radio development engineer of the Bell Laboratories, outlined the nature and performance characteristics of transmitting and receiving apparatus for use in the new part of the spectrum.

Walter S. Lemmon
International Business Machines Corp.

THE business world's radio weapon—the Radiotype—was described by Mr. Lemmon who said operation of typewriters by remote control through one stenographer at the Radiotype is peculiarly fitted to the ultra-high frequencies. A large number of machines could be operated within a single megacycle, he added. After the Radiotype, he predicted, will come remote control circuits for tabulating and electric bookkeeping machines, all under control from a central point so that a group of stores can have its inventories and sales and other items at a central point each day or even every hour. He thought these inventions would play an important part in American commerce and industry and should receive the serious consideration of the FCC.

C. D. Haigis
Haigis Laboratories Inc.

MR. HAIGIS described the New Jersey Forestry fire fighting radio network, while E. J. Vanderwall advocated ultra - high frequencies for forest radio services in Wisconsin. Mr. Haigis felt FCC should only temporary assignments for television and caution and flexibility should rule in allocations.

Elmer L. Brown
Brown Rayphones, San Francisco

A SPECIALIST on police radio, he depicted interference in California from eucalyptus trees and therapeutic electrical machines as serious to ultra - highs. The diathermy devices affected seriously in cities 30 to 100 megacycles. The remedy lies in filtering and shielding so emission only traveled a few hundred feet, he said.

Gerald N. Goldberger
Television Research Corp., 218 W. 42d St., New York

THREE-INCH cathode ray tubes were visualized by Mr. Goldberger as a means of reducing cost of television receivers and minimizing danger of breakage in high-pressure nine-inch tubes. These, he predicted, could withstand magnification of ten times. He urged that auto makers reduce interference due to ignition systems.

Broadcasting Group

BEN S. FISHER, Washington radio attorney, submitted engineering studies on ultra-high experimentation in facsimile by KOMO and KJR, Seattle, as well as KSL, Salt Lake City; WTMJ, Milwaukee; WBAP, Fort Worth. R. V. Hamilton of the *St. Louis Star-Times* did not take the stand but presented a statement on the high-frequency tests of W9XOK.

Haraden Pratt
Mackay Radio & Telegraph

MR. PRATT suggested the use of ultra - high frequencies in fixed services not only for facsimile but for remote control from stations and city operating rooms and for domestic radiotelegraph high speed service. For these uses he thought around 100,000 kc. the best range. He proposed a 50 to 60 mc. range for marine service in harbor radiotelegraph and prevention of collisions at sea by radio beams.

R. D. Wyckoff
Gulf Research & Development Co.

THE ultra - high frequencies were described as peculiarly adapted to the reflection seismograph method of geophysical radio with transmissions of very short distances of ⅛ to ½ miles. He stated geophysical exploration has become a vital part of the oil industry, adding that 140 units are now in use in Texas and Louisiana alone.

Dr. F. A. Kolster
I. T. & T.

THE PROBLEMS before the FCC in opening up the new frequency range from 30 to 200 megacycles were delineated by Dr. Kolster, speaking for Mackay Radio. He urged that the ultra-high frequency spectrum for some time to come be viewed as a great national laboratory, "restricted to none and governed in the spirit of guidance and encouragement to all". He felt that many new services are adaptable for the ultra-highs, those with the purpose of safety of life and property at sea and in the air being of especial importance.

18 DAILY NEWSCASTS!
KFEL - KVOD
—— Denver ——

RIGHT BACK WHERE THEY STARTED FROM!

Box-tops — over fifty thousand of them — poured back to the sponsor, impelled by the dynamic force of a brief, powerful, well-executed radio campaign* released over the Don Lee California network. Put **your** next campaign in California on DLBS and expect **better** results.

(A partial pile of White King Granulated Soap box-tops received on a 14-weeks' campaign for the Los Angeles Soap Company. *Produced and placed by the Raymond R. Morgan Company, Hollywood, California.)

DON LEE BROADCASTING SYSTEM

550 miles is no obstacle to a satisfied customer. That is why Gately's clothing store insisted that the entire cast, continuity editor and production staff of their Iowa Network show travel from Des Moines to Tulsa to inaugurate the opening of their Oklahoma store. Gately's like the way we sell. That's why the account has grown from one spot announcement to two one-quarter hour shows daily.

The three stars of the Gately show: (from top to bottom) The characters: Wayne, Little Miss Gately and Smilin' Dan

CBS Basic, Des Moines — NBC Basic Blue, Cedar Rapids-Waterloo — NBC Basic Blue, Des Moines

IOWA NETWORK

Radio Stations of The Des Moines Register and Tribune

Official Registration
FCC Ultra-High Frequency Hearings

John Aitkenhead Jr., WADC, Akron.
Fred W. Albertson, attorney, Washington.
R. D. Arminger, Short Wave Institute of America, Washington.
Edward H. Armstrong, Columbia University, New York.
Earle C. Anthony, KFI, Los Angeles.
Isaac D. Buckwalter, Mason-Dixon Group, Lancaster, Pa.
William J. Bain, Canadian Government, Ottawa, Ont.
I. R. Baker, RCA Victor Co., Camden, N. J.
James W. Baldwin, NAB, Washington.
Thomas Baker, Press Wireless Inc., Hicksville, N. Y.
John H. Barron, consulting engineer, Washington, D. C.
William E. Beakes, Tropical Radio Co., Boston.
Frank V. Becker, WFIL, Philadelphia.
Carroll O. Bickelhaupt, A. T. & T. Co., New York.
H. R. Blomquist, United Electric Railways, Providence.
H. L. Blatterman, KFI, Los Angeles.
L. F. Bockerem, Western Electric Co., New York.
Ralph Bown, Bell Laboratories, New York.
John B. Brady, attorney, Washington.
William M. Brandon, Davenport, Ia.
B. F. Brooke, Pennsylvania Railroad, Philadelphia.
Elmer L. Brown, Brown Rayphones, San Francisco.
J. Stanley Brown, Washington (D. C.) Radio Club.
I. Brimberg, City of New York.
Carl H. Butman, radio consultant, Washington.
Harry Butcher, CBS, Washington.
Burridge Butler, WLS, Chicago.
Martin Campbell, WFAA, Dallas.
E. K. Cargill, WMAZ, Macon, Ga.
H. K. Carpenter, Cleveland (WHK, WHKC, WJAY).
Howard A. Carter, Council on Physical Therapy, Chicago.
Joseph A Chambers, consulting engineer, Washington.
Lloyd N. Chatterton, police department, Cleveland.
Ralph Clark, Television Corp. of America, New York.
Robert L. Coe, KSD, St. Louis.
Edwin K. Cohan, CBS, New York.
J. O. Coleman, Edison Electric Institute, New York.
F. B. Cole, Canadian Pacific Ry., Montreal.
Ray Collins, WFAA, Dallas.
A. L. Colston, New York Board of Education.
H. L. Cornell, American Steamship Owners Assn., New York.
H. P. Corwith, Western Union, Watermill, Long Island.
A. J. Costigan, Radiomarine Corp. of America, New York.
Andrew W. Cruse, Department of Commerce, Washington.
Homer B. Courchene, WLS, Chicago.
Lt. E. E. Comstock, U. S. Coast Guard, Washington.
E. P. Coffee, Dept. of Justice, Washington.
Lt. Col. D. M. Crawford, Army Signal Corps, Washington
T. A. M. Craven, FCC, Washington.
L. G. Cumming, Boston.
Raymond Dalton, WDNC, Durham, N. C.
Walter J. Damm, WTMJ, Milwaukee.
C. F. Daugherty, WSB, Atlanta.
James F. Davenport, supt. of hydro generation, Los Angeles.
C. E. Davies, Western Union.
S. E. Darby, Jr., patent attorney, New York.
Dr. J. H. Dellinger, Bureau of Standards, Washington.
Paul A. deMars, Yankee Network, Boston.
G. J. Dempsey, FCC, Washington.
E. C. Denstaedt, Detroit police department.
J. D. DesRocher, Police Station WRDR, Grosse Pte., Mich.
C. C. Dill, attorney, Washington.
Everett L. Dillard, Commercial Radio Equipment Co., Kansas City.
F. M. Doolittle, WDRC, Hartford.
J. G. Drysdale, chief of police, Grosse Pte. Park, Mich.
J. D. Durkee, Western Telegraph Co., Bartlesville, Okla.
H. W. Eales, Edison Electric Institute, Chicago.
E. W. Engstrom, RCA Mfg. Co., Camden, N. J.
Walter Evans, Westinghouse E. & M. Co., Chicopee Falls, Mass.
Lloyd Espenschied, Bell Laboratories, New York.
Frank Falknor, CBS, Chicago.
Philo T. Farnsworth, Farnsworth Television Inc., Philadelphia.
Capt. Charles D. Farmer, state highway patrol, Raleigh, N. C.
John E. Fetzer, WKZO, Kalamazoo.
W. G. H. Finch, Finch Telecommunications Laboratories, New York.
Ben S. Fisher, attorney, Washington.
Donald Flamm, WMCA, New York.
William S. Foss, consulting engineer, Washington.
Lieut. F. R. Furth, U. S. Navy, Washington.
D. W. Gellerup, WTMJ, Milwaukee.
Glenn D. Gillett, consulting engineer, Washington.
T. R. Gilliland, International Scientific Radio Union, Washington.
E. J. Girard, Mackay Radio, Washington.
William N. Greer, WNFL, San Juan, P. R.
Earl D. Glatzel, Edison Electric Institute, Detroit.
Paul F. Godley, consulting engineer, Montclair, N. J.
G. N. Goldberger, Television Research Corp., Brooklyn, N. Y.
Paul Goldsborough, Aeronautical Radio Inc., Washington.
Dr. P. C. Goldmark, CBS, New York.
Emil J. Gough, Hearst Radio Inc., New York.
V. Ford Greaves, FCC inspector, San Francisco.
William Green, A. F. of L., Washington.
S. D. Gregory, Westinghouse E. & M. Co., Springfield, Mass.
Gerald C Gross, FCC, Washington.
James W. Gum, attorney, Washington.
C. D. Haigis, Haigis Laboratories and New Jersey Forest Fire Service, Maple Shade, N. J.
Hugh A. L. Halff, WOAI, San Antonio.
J. T. Hallman, WOAI, San Antonio.
Ray V. Hamilton, St. Louis Star-Times (W9XOK).
James H. Hanley, attorney, Washington.
E. H. Hansen, 20th Century Fox Film Corp., Hollywood.
Harry Hacker, Lincoln, Neb. (KFAB, KFOR, KOIL).
Herman Haverkamp, New York.
Volney D. Hurd, Christian Science Monitor, Boston.
J. G. Haycock, Haigis Laboratories, Maple Shade, N. J.
Alan Hazeltine, Hazeltine Corp., Hoboken, N. J.
R. L. Harrell, Mackay Radio, New York.
Ralph Heintz, Globe Wireless Ltd., San Francisco.
P. J. Hennessey Jr., NBC, Washington.
James M. Herring, University of Pennsylvania.
Walter R. Hoffman, WWJ, Detroit.
Hamilton Hoge, Television Corp. of America, New York.
Harrison Holliway, KFI, Los Angeles.
Capt. S. C. Hooper, U. S. Navy, Washington.
A. F. Hopkins, Jr., U. S. Coast Guard, Washington.
Lieut. Paul W. Hord, U. S. Navy, Washington.
L. C. F. Horle, consulting engineer, New York.
C. W. Horn, NBC, New York.
Harvey Hoshour, A. T. & T. Co., New York.
Earl C. Hull, WKY, Oklahoma City.
G. Porter Houston, WCBM, Baltimore.
E. C. Immel, Michigan State Police, E. Lansing, Mich.
George K. Jacobsen, WDGY, Minneapolis.
J. F. Jarman Jr., WDNC, Durham, N. C.
E. K. Jett, FCC, Washington.
Dr. Frank E. Jewett, Bell Laboratories, New York.
E. R. Johnson, WIP, Philadelphia.
Dr. C. B. Jolliffe, RCA, New York.
Ralph D. Jones, FCC, Washington.
Ralph S. Johnson, Reading, Pa.
Lieut. Martin W. Joyce, Mass. State Police, W. Roxbury.
Alexander Kahn, WEVD, New York.
Lambdin Kay, WSB, Atlanta.
William D. Kelly, WFBR, Baltimore.
D. E. Kendrick, WIRE, Indianapolis.
Bruno W. Kern, Newark.
Emil A. Kern, Associated Engineers, Newark.
Ralph H. Kimball, Western Union, New York.
S. M. Kintner, Westinghouse E. & M. Co., Pittsburgh.
Prof. Glenn Koehler, University of Wisconsin.
Charles C. Kolster, FCC inspector, Boston.
Frederick A. Kolster, I. T. & T. Co., New York.
Emery H. I. Lee, FCC Inspector, Detroit.
Harold O. Landis, WEEU-WRAW, Reading, Pa.
Glen G. Langdon, American Gas & Electric Co., Danville, N. J.
L. G. Leighton, State Road Dept., Jacksonville, Fla.

Washington's
Own
Local station
Washington, D. C.

Leroy J. Leishman, Los Angeles.
John G. Leitch, WCAU, Philadelphia.
R. D. Lemert, DeForest Television Corp., Los Angeles.
Walter S. Lemmon, International Business Machines Corp., Boston.
Capt. D. S. Leonard, International Assn. of Chiefs of Police, Detroit.
G. F. Leydore, WLW, Cincinnati.
Fred M. Link, consultant, New York.
Donald K. Lippincott, Farnsworth Television Inc., San Francisco.
W. B. Lodge, CBS, New York.
Philip G. Loucks, attorney, Washington.
Paul A. Loyet, WHO, Des Moines.
Harry R. Lubcke, television director, Don Lee Broadcasting System, Los Angeles.
Dr. Leon Levy, WCAU, Philadelphia.
Mark L. MacAdam, Brockton, Mass.
J. O. Maland, WHO, Des Moines.
T. E. Mathiot, Mason-Dixon Group, Lancaster, Pa.
Marynard Marquardt, WCFL, Chicago.
John Marshall, Rockefeller Foundation, New York.
Frank Marx, WMCA, New York.
Clair R. McCullough, Mason-Dixon Group, Lancaster, Pa.
Alfred J. McCosker, WOR, Newark.
James C. McNary, consulting engineer, Washington.
G. O. Milne, NBC, New York.
J. M. Moroney, WFAA, Dallas.
Laurence F. Mott, Wisc. Conservation Dept., Tomahawk.
Frank E. Mullen, RCA, New York.
J. D. Munton, Atlantic Communications Corp., Upper Darby, Pa.
Adrian Murphy, CBS, New York.
Albert F. Murray, Philco Radio & Television Corp., Philadelphia.
Edward L. Nelson, Bell Laboratories, Mt. Lakes, N. J.
W. D. Neil, Canadian Pacific Railway, Montreal, Canada.
Eliot Neww, Director of Public Safety, Cleveland.
John L. Niesse, Detroit.
E. N. Nockels, WCFL, Chicago.
G. S. O'Connor, Md. State Dept. of Forestry, Baltimore.
Harold L. Oleson, Weston Electric Instrument Corp., W. Orange, N. J.
H. S. Osborne, A. T. & T. Co., New York.
William Pabst, Brooklyn Technical High School, Garden City, L. I.
E. C. Page, consulting engineer, Evanston.
William S. Paley, CBS, New York.
Herbert M. Peck, WKY, Oklahoma City and KLZ, Denver.
Harold G. Peery, Don Lee Broadcasting System, Los Angeles.
R. M. Pierce, Cleveland (WOR and WGAR).
James V. Piersol, Detroit News, Detroit.
Joseph Pierson, Press Wireless, Inc., Chicago.
J. R. Poppele, WOR, Newark.
Haraden Pratt, Mackay Radio & Telegraph Co., New York.
M. L. Prescott, General Electric Co., Schenectady, N. Y.
Arthur G. Previn, Washington.
Walter J. Quick Jr., Md. State Dept. of Forestry, Baltimore.
Wm. Q. Ranft, WFBR, Baltimore.
Geo. P. Rankin Jr., WMAZ, Macon.
Robert Robins, New York.
Frank M. Russell, NBC, Washington.
R. J. Rockwell, WLW and WSAI, Cincinnati.
Reed T. Rollow, attorney, Washington.
Paul Rosekrans, engineer, State of N. C.
Harold Rothrock, attorney, Washington.
Comdr. W. J. Ruble, U. S. Navy, Washington.
Edward R. Sanders, WTIC, Hartford.
David Sarnoff, RCA, New York.
Lieut. C. J. Scavarda, Michigan State Police, E. Lansing.
Arthur Scharfeld, attorney, Washington.
Oswald F. Schuette, Shortwave Institute of America, Washington.
William J. Scripps, WWJ and W8XWJ, Detroit.
G. Richard Shafto, WIS, Columbia, S. C.
M. G. Shrode, U. S. Coast Guard, Washington.
A. G. Simson, U. S. Forest Service, Portland
Lloyd H. Simson, Bureau of Air Commerce, Washington.
S. H. Simpson, Jr., RCA, New York.
Hector R. Skifter, KSTP, St. Paul.
J. M. Skinner, Radio Mfg. Assn., Philadelphia.
G. W. Spaulding, Penn. Water & Power Co., Baltimore.
L. W. Stinson, KVOO, Tulsa
A. A. Stuart, State Road Dept., Jacksonville, Fla.
John W. Studebaker, U. S. Commissioner of Education, Washington.
Glenn Snyder, WLS, Chicago.
G. E. Sterling, FCC Inspector, Baltimore.
T. DeWitt Talmadge, Tennessee Valley Authority, Chattanooga.
G. L. Taylor, W9XBY, Kansas City.
W. D. Terrell, FCC, Washington.
A. E. Thiessen, General Radio Co., Cambridge, Mass.
Dr. Frank A. Wolff, Bureau of Standards, Washington.
F. W. Wozencraft, RCA, New York.
Grant Wrathall, Washington.
R. D. Wyckoff, Gulf Research & Development Corp., Houston.

David E. Tolman, attorney, Washington.
Kern Tips, KPRC, Houston.
F. E. Travis, W4XAU, Nashville.
Seymour Turner, Farnsworth Television Inc., Philadelphia.
George S. Turner, FCC Inspector, Atlanta.
G. H. Underhill, Edison Electric Institute, Poughkeepsie, N. Y.
J. H. Uhalt, WDSU, New Orleans.
Harold C. Vance, RCA, Chicago.
Irving Vermilya, WNBF, New Bedford, Mass.
S. M. Viele, Pennsylvania Railroad, Swarthmore, Pa.
H. J. Walls, Department of Labor, Washington.
K. B. Warner, American Radio Relay League, Hartford.
Sydney E. Warner, W1XBS, Waterbury, Conn.
Charles V. Wayland, attorney, Washington.
Fred Weber, Mutual Broadcasting System, New York.
C. H. Wesser, WWJ and W8XWJ, Detroit.
William H. West, WTMV, St. Louis.
John H. Wharton, attorney, New York.
Lynde P. Wheeler, consulting physicist.
J. E. Whitehouse, WLW, Cincinnati.
L. E. Whittemore, A. T. & T. Co, New York.
Horatio B. Williams, Columbia University, New York.
Ralph O. Williams, Dept. of Conservation, E. Lansing, Mich.
John E. Wing, Chicago.

Paul A. De Mar
Yankee Network

THE FCC was urged to give most careful consideration to frequency modulation for the ultra-high frequencies by Mr. De Mar. He felt that the promise of this new art for broadcasting was so highly important as to warrant the study of its potentialties. On the basis of Yankee Network experimentation he said that noise problems and field strength were two of the main problems to be solved. The outstanding interference came from automobile ignition but there were many other sources of interference at the 61 mc. band which he had used. He suggested that by frequency modulation a broadcasting station may on the same channel provide facsimile without impairment of the sound broadcasting.

Ralph D. Heintz
Globe Wireless Inc.

MR. HEINTZ advocated an ample allocation to television by the FCC so no obstacle should be placed in its way for full development. Upon the allocation without any "ham-stringing" will depend the fate of television. It is sure to come, he said, and the government ought to do everything to encourage its progress. He urged flexibility and liberality in FCC rules on new ultrahighs. He told FCC that his company was engaged in two patent suits with RCA.

NEWS!
On the Hour—
Every Hour!
(7 A. M. to Midnight)
KFEL - KVOD
— DENVER —

Flowers that bloom in the summer TRA-LA

NEW WESTERN ELECTRIC EQUIPMENT

AFFILIATED CBS

ABSOLUTE HIGH FIDELITY
420 FT. BLAW-KNOX VERTICAL RADIATOR

ABOUT August 15th KFBB in Great Falls, Montana will blossom out in a complete new ensemble consisting of a new high fidelity 5 kilowatt Western Electric transmitter, housed in a modern new fireproof building, and a 420 ft. vertical Blaw-Knox tower.

With this new equipment the coverage area of Radio Station KFBB will be greatly increased and the thousands of Montana listeners who depend upon KFBB for the only reception available in this part of the country will be greatly benefited, not only by an increase of this station's signal strength but also in the quality of programs due to the fact that an affiliation with the Columbia network has recently been announced.

K F B B

GREAT FALLS • MONTANA

National Representatives:
JOSEPH HERSHY McGILLVRA
485 Madison Ave., New York; Palmolive Bldg., Chicago
WALTER BIDDICK CO.
568 Chamber of Commerce Bldg., Los Angeles; 1358 Russ Bldg., San Francisco; 3326 Stuart Bldg., Seattle.

Sarnoff Foresees Great Progress

(*Continued from page 39*)

paying license fees, but they are buying the finest radio receivers in the world at the lowest prices. No wonder, as Prof. Allport of Harvard has declared, we spend a billion hours a week listening to the radio!

During 1935 it is estimated that the people of the United States spent 700 million dollars on radio —truly a figure which demonstrates the magnitude of the industry and its importance to the prosperity of the nation.

Probably the most striking figure in all the columns of radio statistics is the estimate that the American public has invested more than three billion dollars in broadcast receiving apparatus. This is more than ten times the investment in broadcasting stations and radio manufacturing plants. From this you will realize the extent of the general public's interest in the healthy development of radio.

No statistics, however, can suggest the magnitude of the future of the radio art. Each advance made by the laboratories into unexplored domains of the ether carries with it the possibility of creating even greater services. A few, such as television and high-speed facsimile communication, are ready now for field demonstrations. Others are on the way, although further laboratory experimentation will be necessary before they are ready for practical use.

This research represents an immense investment in capital and an incalculable investment in human genius. It is fascinating as a conquest of the unknown, and thrilling because of its promise of increased human power, knowledge and happiness. Yet, considered coldly as an economic element, it is particularly significant at this time when the country is emerging from the depths of an economic depression. The new instrumentalities of radio hold the promise of new industries, new services productive of new wealth and new employment.

Where Television Stands

OF THE FUTURE industries now visible on the horizon, television has gripped the public imagination most firmly. Technically, television is an accomplished fact, although it is not yet ready commercially. In this field American research holds the lead and America's supremacy, as in other fields of radio, is universally recognized.

To bring television to the perfection needed for public service our work proceeds under high pressure at great cost and with encouraging technical results. Other nations are accepting the standards and methods of RCA engineers and are applying them to the solution of their own television problems. Most of these foreign nations have been working with public funds.

No such government subsidies of course have been available in the United States. None has been asked. But for more than a decade in years of plenty and in years of depression, a corps of RCA research engineers has been working unremittingly to give the art of television to the public. We are now entering advanced stages of that effort and will open an experimental television transmitting station in New York within two weeks. We believe that we have demonstrated again that private initiative can accomplish more in America than government subsidy has been able to accomplish elsewhere.

The television which is assuming shape in our laboratories will not, as many persons assume without warrant, replace sound broadcasting or make sound receiving sets obsolete. The present sound broadcasting services will proceed without interruption. Television must find new functions, new entertainment and new programs.

As soon as television has been brought to a point of practical service it will be made available to the American people. But to protect the public interest, television should not be launched until proper standards have been fixed. Television reception as we now know it differs from sound reception in at least once decisive technical aspect. In sound broadcasting every receiver is built to pick up any transmission within its range of reception. On the other hand, television represents an integrated system in which sending and receiving equipment must be fitted one to the other, as lock and key. We must avoid the danger of costly obsolescence which hasty commercialization might inflict upon the public.

We ask the Commission and the various government departments interested in radio to consider carefully the needs of this new industry. Frequencies should be made available not only for the expanded experimental and field demonstration work, but for the fullest measure of development toward a practical television service.

A Free Service

RADIO broadcasting differs from all the other arts in that the service which it renders to the public is rendered free. There is no license fee for the use of radio receiving sets in the United States. And when television comes, it is my hope that despite the greater expense of its far more complicated program productions, there will still be no need for a license charge for television receivers.

Side by side with television, although in many respects nearer to final achievement, there is emerging from the field of radio experimentation high speed facsimile communication. By means of this new development, written, printed, photographic and other visual matter can be sent by radio over long distances and reproduced at the receiving end with amazing exactness.

It is difficult to imagine limits of the use of such an invention. It should make the dot-and-dash system of telegraphy as outmoded as the pony express. Pictures, sketches, handwriting, typewriting and every form of visual communication, will be transmitted as easily as words are now sent over a telegraph wire. Even in its earlier stages facsimile will be a medium for the instant dissemination of information of a hundred different types, from weather maps to statistics, from educational data to comic strips. Far from displacing the existing media of information—and particularly the newspapers—facsimile should contribute to their progress, providing them with swifter and more effective facilities.

In this new facsimile service we have also reached an advanced stage. R.C.A. Communications Inc., has built an experimental facsimile circuit between New York City and Philadelphia, demonstrated publicly for the first time last Thursday. It uses ultra-high frequencies linked into instantaneous transmission by automatic relays. This circuit will demonstrate the possibilities inherent in facsimile transmission and should also contribute to solving the difficult problems of relaying television programs on these ultra-high frequencies.

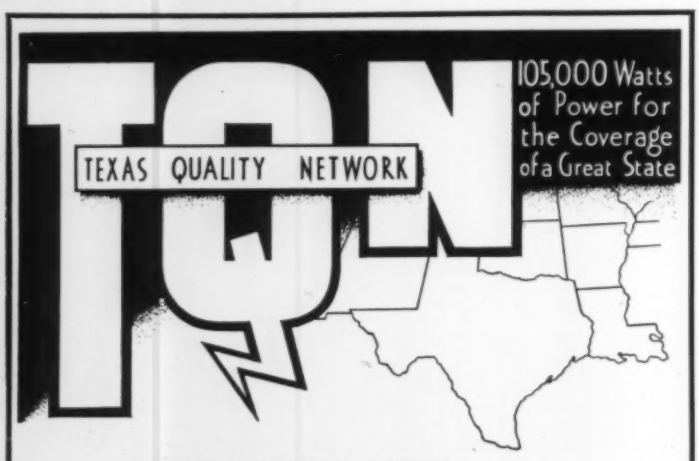
One of the triumphs of this demonstration circuit has been its success in combining, for the first time in radio history, the simultaneous transmission of visual matter with automatic typewriter telegraph operation on the same radio channels. This ability to carry separate services simultaneously on a single frequency is of great importance.

To make possible the greatest public use of this new development, radio channels should be provided which will make room for healthy expansion in facsimile research as well as in service, and the "public interest, convenience and necessity" of this new achievement should be recognized in the alloca-

"Wired for Sound"

A PROPOSAL by Senator Bilbo (D-Miss.) that the Senate chamber be equipped with a public address system, to enable members and visitors to hear the proceedings, was defeated just prior to adjournment of Congress June 20 without even receiving consideration. A parliamentary objection resulted in a ruling by the chair that the measure could not be considered. Senator Bilbo brought out that the acoustics of the Senate chamber were very poor and that recent developments of loud-speaking instruments "are so thoroughly improved and perfected that they can be installed upon the top or side of each senator's desk without obstruction and inconvenience." Senator Barkley (D-Ky.) objected, stating that when he was a House member a system was installed and it proved "such a terrific nuisance that it was necessary to 'dis-install' it after a little while."

Business doubled over last year
Reason — Results
"ASK GEORGE ROESLER"
WLBC - Muncie



IT TAKES GREAT POWER to service the Nation's largest State effectively and TQN, combining the 105,000 watts of all the NBC-affiliates in Texas, is the **only** medium that can possibly deliver your sales message into every radio home in this great State. Additionally, TQN provides potent coverage of Oklahoma and portions of five other states . . . The TQN combination of "first in public favor" stations provides a network that is productive, yet economical. This year it offers the plus value of a huge Centennial market. Investigate through *Edward Petry & Company, Inc., National Representatives.*

50,000 Watts	50,000 Watts	5,000 Watts(D)	50,000 Watts
WFAA	**WBAP**	**KPRC**	**WOAI**
DALLAS	FORT WORTH	HOUSTON	SAN ANTONIO

Texas' Only Complete State Wide Radio Service

tion of frequencies for this purpose.

It is the mastery of the ultra-high frequencies which is bringing television and facsimile within the area of practical use. We are steadily pushing farther into the higher regions of the spectrum which only yesterday constituted a "radio desert", now being made fruitful. One example will illustrate the great possibilities in this direction: Ultra-high frequencies have a range which is limited approximately by the horizon so that the same frequency may be used over and over again by keeping the transmitters 100 to 200 miles apart. This means that relatively few frequencies assigned for local broadcast use can be reassigned until every community in the land can possess a radio voice for its own local purposes.

This expansion of the useful radio spectrum has only begun. Beyond the ultra-high frequencies lie the "micro-waves"—frequencies that oscillate at the rate of a billion cycles a second, wavelengths measured in centimeters instead of meters.

Future developments in micro-waves may well prove revolutionary. In the past, radio operations have been confined to a limited part of the radio spectrum. Once we have conquered these micro-waves we shall have opened a radio spectrum of almost infinite extent. Instead of numbering the useable channels in a few scant thousands, the radio art will put millions of frequencies at the command of communication services of every kind. When that day comes—and I have no doubt that it will—there will be frequencies enough to make possible the establishment not only of an unlimited array of mass communication services, but of an unlimited number of individual communication connections. In that day each one of our millions of citizens may have his own assigned frequency to use wherever he may be.

Step by step we are working toward that far off goal. We are telegraphing and telephoning today by radio to and from ships at sea and planes in the air. There is no reason we should not also be able to communicate with moving trains, or for that matter with moving automobiles. We can almost say that without radio, aviation would be impossible. In approaching such potentialities we must not allow our imagination to be earth bound. Radio belongs to the new day—the search for service and wealth above the earth. The finding of a new range of frequencies is of more importance than the discovery of a new gold field.

Foreign Broadcasts

RECENTLY international broadcasting has been in the limelight. The European crisis made overseas events an important factor in our daily interest. The technique of this international broadcasting is being constantly improved. Although this use of shortwave radio is still in its infancy, it merits vigorous encouragement. International broadcasting should promote better understanding among nations and—from our own national standpoint — better understanding of the United States among the nations of the world.

Rapid Progress

THE GROWTH of international broadcasting should increase all other forms of international communications and promote our international commerce. To make such an achievement possible, America's international broadcasting should be organized as a definitely functioning service and the available international frequencies should be utilized to their fullest extent.

From time to time there are suggestions that it is the duty of the FCC to protect the wire services of the country against the encroachment of radio. Even if the Communications Act which created your Commission had not prohibited such an attempt, by saying that your Commission shall "generally encourage the larger and more effective use of radio in the public interest," such an effort would be a futile one. Any effort to stop the progress of a new art in order to protect an existing art is bound to be futile.

Such a step would be contrary to the spirit of the country, contrary to the modern spirit of progress, and contrary to the whole experience of radio. For radio itself deliberately obsoletes today what it built yesterday. But for that fact, we would still be signalling with long waves from great alternators instead of spanning the earth with short waves from vacuum tubes.

So long as there is an insufficiency of frequencies, it is proper for your Commission to conserve those frequencies by not using them needlessly to compete with wires. However, the policy which underlies such a decision should never have for its object the protection of wire services. It should always have for its object the protection of radio frequencies.

Your Commission will not be afraid of progress. Millions of dollars are being spent by the radio industry to invent new equipment and erect new stations which are made obsolete by the very things we learn in building them.

The facsimile and television stations which the RCA has just built, for instance, may be made obsolete by the lessons they will teach us. We set up new systems and then we encourage our research workers to continue their experiments even if they supplant what we have created. Why? Because it is the only way to make progress. Such experiments call for enormous capital investments. They call also for imagination of the highest order and for courage to follow where that imagination leads. It is in this spirit that our laboratories and our radio scien-

$10 Buys One-Minute Announcements During NEWSCASTS! KFEL - KVOD — DENVER —
(See chart, page 134 this issue)

THE SOBY YARDSTICK OF AUDIENCE VALUE
Impartial and comparable data about the size and location of the audience of radio programs and stations.
Write for information and prices.
BENJAMIN SOBY AND ASSOCIATES
1023 Wallace Ave. Wilkinsburg, Pa.

WORK
WDEL
WGAL
WAZL
WEST
MASON DIXON RADIO GROUP INC.
PRIMARY COVERAGE FOR SPOT BROADCASTING in one of the country's richest industrial and agricultural sections covering portions of four states, available through the facilities of the MASON DIXON RADIO GROUP: — Among the buying centers covered in this densely populated area with its high percentage of radio receivers, are—Lancaster, York, Reading, Harrisburg, Lebanon, Steelton, Hazleton, Wilkes-Barre, Easton, Bethlehem, Allentown, Chester, Pottsville, Shamokin, Shenandoah, Mahanoy City, Tamaqua, Nanticoke, Stroudsburg, Bangor, Nazareth, Bath and West Chester in Pennsylvania. Wilmington, Newcastle, Newark and Dover in Delaware. Phillipsburg, Bridgeton, Salem, Penns Grove, Vineland, Millville and Washington, New Jersey. Hagerstown, Frederick, Elkton, Havre de Grace, Salisbury and Chestertown in Maryland. Address inquiries to:—
MASON DIXON RADIO GROUP, INC.
Clair R. McCollough, Gen. Mgr. Lancaster, Pennsylvania

tists are diligently and devotedly engaged in a task of the highest service to humanity.

Radio research is so closely linked to the manufacture of apparatus that I feel warranted in explaining to your Commission the basic patent policy of the RCA, and particularly its application to the new fields of facsimile and television. It has been the policy of the Radio Corporation to grant licenses to its competitors engaged in the manufacture of radio broadcast receivers and tubes, and at the present time there are outstanding 52 such licenses for receivers and 13 for tubes. These licenses include the right to make and sell not only sound broadcast receivers and tubes, but also receivers and tubes for television and facsimile for the home, thus making available the results of our research in these fields to licensed manufacturers of the industry. In manufacturing and selling this apparatus the RCA licensees may utilize all of the inventions made or owned by the Radio Corporation, and all patents under which it has the right to grant licenses to others.

Measured by the advances made in other fields, radio in the last ten years has lived a century. Perhaps it may crowd a thousand years into the next decade. I am proud to be one of those who have participated in this development almost from the beginning. Next September I shall have been in the service of radio for 30 years. That is a long time in so young a science. During these thirty years I have watched, naturally with the keenest interest, the unfolding of the radio art. I have seen technical revolutions in radio communication, radio broadcasting and radio entertainment, but I can say to you that never before have I seen so many developments emerging into practical achievement as the laboratories promise at this moment.

Offers Suggestions

OUT OF this experience I should like to lay before you a number of suggestions. I trust they may be helpful to your Commission, and to the Government, in the task of formulating a basic and comprehensive radio policy. Such a policy is needed to maintain America's supremacy in radio and to fortify the independence of our country's position in this growing field. My suggestions, summarized, are as follows:

1. Because of the rapid strides of the radio art, advance reservations of frequencies should be made by the FCC to meet the needs of future services, such as television, facsimile and high-frequency broadcasting. This will enable these achievements of radio to give their greatest possible public service as soon as developed, instead of compelling them to contest with older services for adequate space in the spectrum.

2. Except for experimental purposes, no allocations to individual applicants should be made in these reserved frequencies until actual public service is possible. No one should be permitted to reserve frequency space for future use and then let it remain idle while others carry the burden of development.

3. In allotting frequencies the greatest economy and usefulness of the available channels should be promoted by requiring, so far as feasible, the multiple use of frequencies.

4. In determining precedence in the allocation of frequencies, consideration should be given to services on the basis of their comparative importance to the public, the urgency of the tasks to be performed, and the requirements of the public to be served. Radio has made possible outstanding progress in mass communication. Ample allocation should be made for the greatest use of this public service for the broadcasting of sight as well as of sound, nationally and internationally.

5. In time of war, or other emergency, all the equipment and resources of the radio industry, are by law placed at the disposal of the nation. The government departments interested in our national defense should, therefore, cooperate in making possible the greatest peacetime development of radio by limiting the number of frequencies requested for exclusive government use.

6. A fundamental and comprehensive communications policy should be formulated, not only for the guidance of the Commission, but of all government departments, to safeguard the independence of America's communication system in international relations. This is especially important because American communication services are at a disadvantage in dealing with monopolistic state-owned foreign communication systems.

7. In helping to determine the attitude of the United States in the International Communications Conference to be held in Cairo in 1938, the FCC should recommend a policy which will promote the greatest possible international use of radio communications. That Conference will be called upon to apportion the hitherto unallocated frequencies in the upper portions of the radio spectrum. In the international field as well as in domestic use these allocations should be safeguarded against any possibility of freezing radio development.

POPPELE'S LATEST—Jack Poppele, WOR chief engineer, recently elected to the board of directors as well as secretary of Bamberger Broadcasting Service, devised this midget microphone preamplifier for the Democratic convention. It weighs less than three pounds, measures less than 5 inches the longest way, has a net gain of 90 cb, provides a linear response from 20 to 20,000 cycles and combines a two-circuit mixer with a three-stage, audiofrequency amplifier. It incorporates new AmerTran midget audio transformers and RCA acorn tubes.

WIL

THE PIONEER COMMERCIAL STATION IN ST. LOUIS

Headquarters during Convention Sherman Hotel.

Gulf States Steel Plants
and the
Goodyear Rubber Plants
are operating 24 hours a day in Gadsden, Ala.
WJBY GADSDEN, ALA.

Board in Canada To Name Manager Of Radio System

Public-Operated Corporation To Replace the Former CRC

By JAMES MONTAGNES

A BILL to create a government broadcasting corporation modeled on the British Broadcasting Corp. passed the House of Commons and the Senate at Ottawa before Parliament prorogued last month, leaving the government the summer months to name the nine directors who will pick the general manager and assistant general manager to run the new system, and to replace the Radio Commission. Meanwhile the present executives of the Canadian Commission carry on the operation of the six stations which the new corporation inherits and the program activities which feed basic and optional private stations from coast to coast.

Financial Setup

THE NINE directors will be appointed, three for one year, three for two years, and three for three years, with subsequent appointments for three-year periods, retiring directors being eligible for reappointment. The positions carry annual remuneration of $1,500 for the chairman and a maximum of $500 for other directors based on $50 for each meeting attended. Should an executive committee be appointed each member will receive $1,000 a year. In addition expenses will be paid. There is no salary assigned for the general manager and his assistant, allowing leeway to get the best possible Canadian-born radio executive available.

In the matter of finance the corporation will be able to make expenditures up to $10,000 without approval of the government's order-in-council, will be allotted by the government for capital advances up to $100,000 and for capital works up to $500,000. The government advances to the corporation are to be first charges on the revenue accruing to the corporation from the sale of licenses and other sources. Minister C. D. Howe stated there would be no increase in the $2 annual license fee, as the present rate was "all the traffic would bear". All the money from the license fees will go to the corporation account, except the cost of collection which is retained by the Department of Marine's radio branch. License vendors receive 15%.

Last minute changes included the necessity of an order-in-council for the issuance of any new private broadcasting station licenses. The Minister having charge of radio will not have authority of his own to grant such licenses. On this subject ex-premier Bennett stated in Parliament that if the granting of private station licenses were left in the hands of the general manager, there would be difficulties; if left in the hands of the government it would mean the end of public ownership, since pressure on a government from private interests in Canada and from the United States chains would mean the creation of more private stations and the end of public ownership. He did not believe the British system would work in Canada.

* * *

THE Canadian Performing Rights Society came in for sharp criticism during the Parliamentary debate on the Copyright Act which proposes to set up a board to review the fees charged by the Society. Conservative Hamilton member H. Wilton insisted the Society "should not be allowed even to operate in Canada, being a racket, being unfair and unjust, and a giant monopoly. It was not safe to whistle a tune or play a mouth organ for fear it infringed the society's claims," he said.

Conservative member for Kootenay, W. K. Elsing, charged the Society with collecting fees for compositions it did not control, citing a Toronto organization which wanted to put on the "Pirates of Penzance" and broadcast seven minutes of it. The broadcast station officials were told the fee for the seven minutes would be $61. Then it was found the Society had no right of ownership on the opera, that it was public property. Mr. Elsing asked if this happened once, how many more times did it occur. The Society claims control of 2,000,000 musical compositions.

KVI and KOL Increased

TWO STATIONS in the Seattle-Tacoma area — KVI and KOL — were authorized by the FCC Broadcast Division June 20, to increase their day power to 5,000 watts. KVI, operating on the choice 570 kc. channel was given its five-fold power boost effective July 7. It will continue operating with 1,000 at night. In the case of KOL, the FCC reconsidered and granted its application for a day power increase to 5,000 watts on 1270 kc., with 1,000 watt night.

Baldwin Asks More Wave Bands

(*Continued from page 40*)

be destroyed. Moreover, the utilization of wire lines for broadcasting into the homes would in all probability result in fewer programs of local color. This would be the natural and logical result of minimizing competition. And it would place in the hands of too few the responsibilities which accompany the rendition of a service of such great social value as that of broadcasting.

This brings us to the problem of providing additional radio broadcasting facilities which I shall divide into three parts: Aural broadcasting; facsimile broadcasting and television broadcasting.

Aural Broadcasting

AURAL broadcasting is today restricted to those channels available in the frequency band beginning at 550 kc and ending with 1600 kc. A total of 654 stations (including approximately 30 construction permits) have been provided for in this band. Notwithstanding this number of stations there is a large percentage of the total area of the United States and a smaller percentage of the total population that is without consistent and reliable day and night service.

Doubtless improvements can be made in the allocation of frequencies and in the location and construction of stations so as to extend existing service over greater rural areas. But any such enlarged service must be balanced against possible demands by Mexico for the exclusive use of channels now devoted primarily for broadcasting in the United States. The need for additional facilities exists and such needs are certain to grow with an expansion of broadcasting on the North American continent.

In our proposals we have named certain frequencies below 550 kc for broadcasting. Such use is in agreement with the policy of other nations of the world. The propagation characteristics of these long waves are such as would enable broadcasters to greatly improve the service in rural areas. This will be discussed in detail when we present our technical testimony.

Also, in our proposals we have endeavored to provide for sound broadcasting on certain of the high frequencies. We need to know more about them before reaching final conclusions on all their characteristics. Based on the information we have, it is believed they may be utilized for local broadcasting. The specific frequencies requested have been named with the view of making maximum use of receiving sets that may be manufactured for high-frequency reception, with a minimum of interference with other services and consistently with your expressed ideas of "experimentation and evolution".

There is one difference between the proposals of the Radio Manufacturers Association and our own in this regard. We proposed that the frequencies in the bands 36 to 38 mc and 62 to 64 mc be allocated for aural and facsimile broadcasting. Agreeably with the change which has been made in the RMA proposals, as first submitted, we will discuss when we offer our technical testimony, the feasibility of modifying our proposals so as to ask for 40 to 42 mc instead of 36 to 38 mc. The RMA propose that the frequencies 37 to 42 mc be allocated for aural broadcasting and they have objected to our proposal in respect of 62 to 64 mc because it would interrupt a continuous band for television.

Interference Problems

OUR PURPOSE in asking for the two bands is twofold: First, we do not know where long distance interference ends. We do know, however, that the probability of troublesome long distance interference, now or in the future, is very much less on 60 mc than on 40 mc. Adequate opportunity should be given to obtain reliable data concerning operation on the various high frequencies. Secondly, we do not consider it should be objectionable to anyone to provide for sound broadcasting in the television band.

We know of no reason why the purchaser of a television set should be limited to the sound broadcasting service receivable on the television channels. Moreover, we know from experience that in the manufacture of receiving sets, quality of reception is often sacrificed at either end of the receiver band. It is, therefore, highly desirable that provision be made near the middle of the television band for aural broadcasting.

International Broadcasting

WE HAVE proposed a widening of the international bands with but one view in mind. The existing conditions are chaotic. It would seem that this country either should make provision for an international broadcasting service of the highest quality and free from interference or give it up as a bad job. A sufficient number of frequencies, the maintenance of better standards, and more effective international regulations with regard to hours of operation, we believe, can be employed to improve our commerce with the other nations of the world.

Our proposals also provide for the allocation of frequencies for aural, facsimile and frequency modulation, auxiliary broadcast service such as point-to-point relay for broadcasting, synchronization, mobile voice and facsimile pickup. These will be discussed in detail by another witness.

Facsimile Broadcasting

FACSIMILE broadcasting is an impending new service. It is a method of record broadcasting. It is a service that can be supplied through the utilization of existing broadcast frequencies and broad-

(*Continued on page 126*)

TRANSRADIO'S

"Late Sports" Review
6:05 P. M. Daily
KFEL - KVOD
— Denver —

WSUN

ST. PETERSBURG, FLORIDA

5000 W. DAY 620 KC. 1000 W. NIGHT

Affiliated With National Broadcasting Co.

GANDY BRIDGE 6 MILES LONG
CONNECTS ST. PETERSBURG and TAMPA

THE BRIDGE

BETWEEN ADVERTISER AND A SUCCESSFUL RADIO CAMPAIGN IS FLORIDA'S FAVORITE

WSUN

Covering Florida Like the Sunshine

Represented by FURGASON & ASTON Mgr. HAROLD MEYER

CONSIDER-

Mr. Advertiser:

NORTHERN NEW JERSEY

NORTHERN New Jersey is a territory of closely knit, large, and small communities approximating 2,225,000 people who boast community pride and loyalty.

If this were all one city, what a city it would be, the 3rd largest in the United States! . . . Equivalent to the populations of

Boston
St. Louis
Pittsburgh

all put together.

Now WAAT exclusively caters to that local community pride and furnishes the local color that sells! . . .

True, WAAT has a large audience in New York City, Brooklyn, Westchester, Long Island and Staten Island, but you can profitably discount that if you wish—as we do—and consider it a bonus that costs you nothing!

Northern New Jersey is a profitable market and WAAT has proved in numerous cases it delivers profitable business for advertisers in this territory with surprising economy.

No one can effectively listen to two stations at one time! . . . WAAT has its own large and loyal audience that can be made profitable for *you*.

WE HAVE THE FACTS

For instance, take:

CASE HISTORY #7

Nationally-known packers of Bottled Fruit Juice—offered menu chart—limited one to a family. Only 2,000 charts were made available for distribution—yet eight, two minute "plugs" brought 2,157 letters containing labels from his product.

CASE HISTORY #12

Manufacturer of hair preparation received 1,850 requests for Booklet on care of the hair—after twelve one minute "plugs". Close follow up on one thousand listeners who received booklet, showed 535 had purchased his product—300 intended to purchase—29 couldn't afford it—46 did not respond to follow up.

CASE HISTORY #19

Local retailer with seven stores, using WAAT exclusively, showed $30,000 gross increase in sales for the first six months 1935 over the same period in 1934.

Specific details on request.

940 KC
WAAT

Jersey City, Northern New Jersey

Western Electric

display of

BROADCASTING EQUIPMENT

at the

N. A. B. CONVENTION

New Broadcast Transmitter

Vacuum Tube Display
Everything from a peanut to a powerhouse

New low priced Speech-Input Equipment

The Doherty High Efficiency Amplifier
See an actual working model

commercial

commercial
Audio Amplifier
using stabilized
feedback circuit

New
Speech-Input
Panels

New portable
Speech-Input
Equipment

Get
your new issue
of "PICK-UPS"

Etc.
Etc.
Etc.

Distributed by GRAYBAR ELECTRIC CO., Graybar Building, New York, N. Y.

FOUR-FOLD POWER INCREASE

★

New Plant Now Under Construction

WSYR
SYRACUSE

Fastest Growing Medium in SYRACUSE

Baldwin Asks Waves

(Continued from page 123)

cast transmitters. It is our contention that all frequencies allocated for aural broadcasting should be available for facsimile broadcasting as well. There is every reason to believe that facsimile broadcasting can supplement sound broadcasting. It is an economic waste to deny the broadcasters the opportunity to develop this new service through the use of existing broadcasting facilities. Moreover, the utilization of existing broadcast facilities will permit of the kind of competition that has made American broadcasting the greatest in the world. Prevent the development of facsimile on the frequencies that are used today and tomorrow for sound broadcasting and you may guide this new service into monopolistic hands.

Television

NOW as to television. Some day we will have television. I do not know when that day will be. But it will come. When it arrives it will introduce into the American homes a most powerful instrument for good or evil. It can and probably will project the school blackboard into a majority of the homes. Who will control it? Who can control it? Who does now control it?

I appreciate we are concerned here with the technical problem of finding a place in the radio spectrum for its introduction. And we have endeavored to cooperate with other interested parties to suggest bands of frequencies which might be used for television broadcasting.

The requirements for a television channel are very great. As far as we know now one television channel will require a path almost six times as wide as that now devoted to all sound broadcasting in the United States. We have been able to suggest a plan of allocation which would provide eight television channels below 100 mc. This is not enough. A great many technical considerations are involved and a discussion of these will be left to another witness.

There are, however, more than technical considerations involved here. The American broadcasting system is a competitive system. It is a great system because it has been competitive. Men have been spurred on to present better programs and to render a greater public service. It has meant a freedom of the air unmatched anywhere in the world. And our plea today is that you allow television to develop on the same basis. Better we delay the introduction of television than, in enthusiastic haste, inaugurate it and find that through the control of patents, so powerful an instrument is in the hands of too few people. Indeed this expression is but declaratory of the spirit of the Communications Act.

Again, if television is ready to be inaugurated and if you can allocate sufficient frequencies to permit it to grow on the basis of a national competitive service then it seems to me you have a very great responsibility in determining in advance, whether for all practical purposes, the ownership of basic patents, and agreements, if any, between patentees, will permit competition in the construction of television transmitters and receiving sets.

We should also know in advance what relationship, if any, may be established between the sending and receiving apparatus. Will there be freedom in the selection of receiving sets or will the use of terminal facilities be controlled in a manner comparable with the telephone? Surely everyone will agree that those who own television patents are entitled to a reward for their creative work but because of the public service inherent in television, patentees should be denied the right to control its use. Keep it free from the hands of monopoly and allow it to develop only on a national competitive basis.

Show Goes On

ELMA LATTA HACKETT, KFRC, San Francisco, home economist, fractured her right ankle when she slipped and fell in her Berkeley (Cal.) home recently and is doing her broadcasting over the CBS-Don Lee network from a wheel chair. Mrs. Hackett has not missed a broadcast in more than two years, and despite her injury, she was at the studio the following morning to do her *Morning Hostess* program. She will be confined to the wheel chair several weeks.

Connery Criticizes FC And Promises to Revi Plan for Investigati

NOTICE was served on the Hou June 16 by Rep. Conner (D-Mass.) that he again will d mand a "thorough investigati of the FC at the next session Congress "in order that we m protect the American people fr the Radio Trust and Americ homes from profanation by ind cent radio programs".

In a biting address, Rep. Co nery attacked the FCC for its pa ported failure to take acti against stations broadcasting legedly obscene material. He e plained that for 16 weeks his re lution for an investigation of t FCC has been pending without a tion and there was little hope du ing the waning days of this se sion.

Mr. Connery referred particula ly to a script program which declared was broadcast over a st tion that was so obscene that could not be reproduced in t *Congressional Record*. He hand copies of it to interested Congres men, however. In introducing h resolution originally, Rep. Conne attacked particularly an alleged profane Spanish poem broadca over an NBC network early th year sponsored by the Mexica Tourist Bureau.

The Massachusetts Congressma has been staunchly advocating th cause of WLWL, Paulist Father station in New York. The Paul ists, it is understood, recently com plained to the FCC about alleged ly profane plays broadcast ove WOV, New York, in Italian. WO is involved in sales negotiation with WLWL. It is presumed th matter to which Rep. Connery re ferred was a script of these par ticular plays.

DR. KAHLER SHOE SHOP, Lo Angeles correctional shoe company is using KGER, Long Beach, fo four evening hours a week in th form of an all-Jewish musical hour. A free foot analysis, via machine is offered listeners who visit the store and mention the radio pro gram.

Member Station, Columbia Broadcasting System

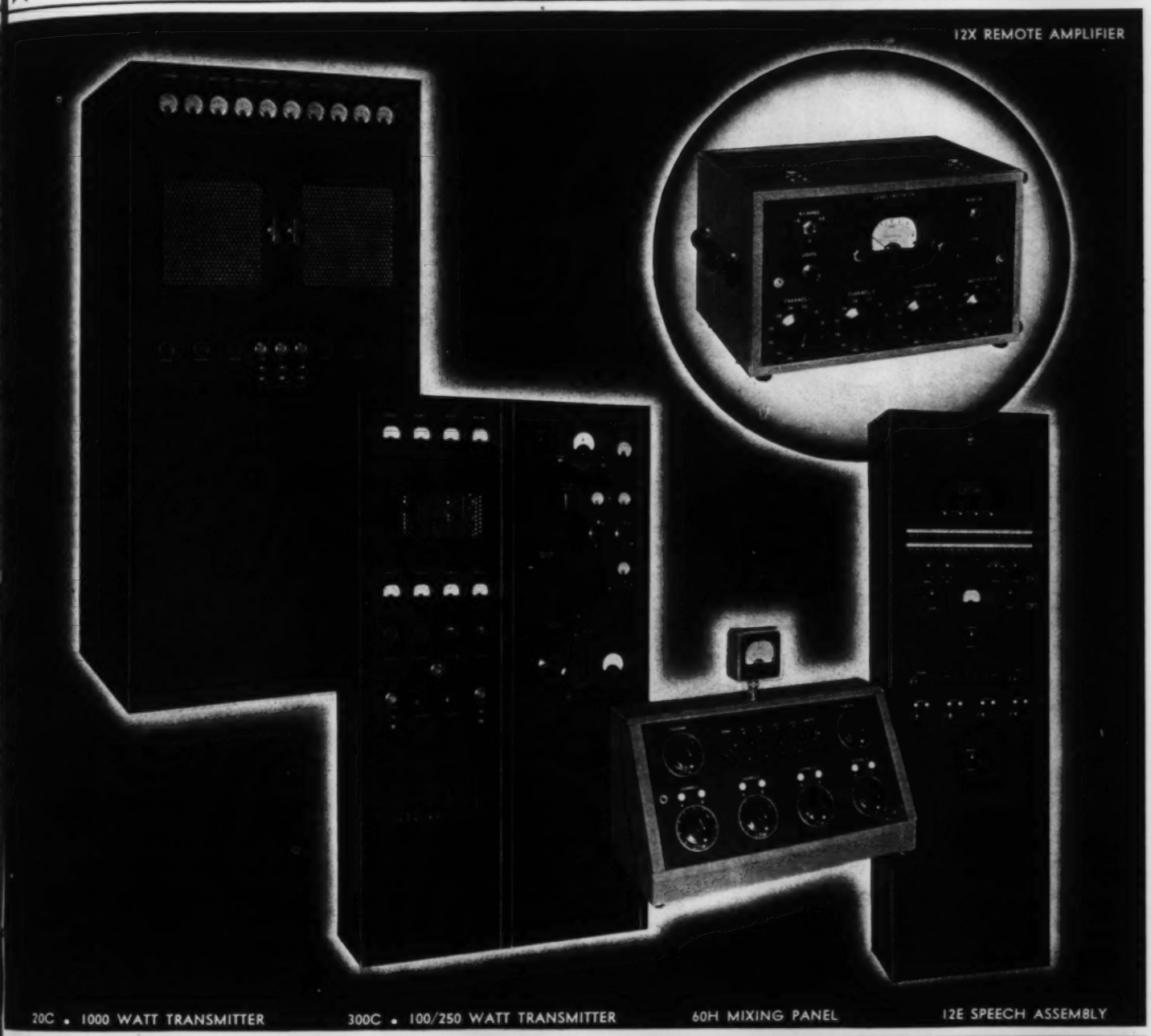
IN NASHVILLE
WLAC
5,000 WATTS
J. T. WARD
President

Paul H. Raymer Co., National Representatives

WIL
THE PIONEER COMMERCIAL STATION IN ST. LOUIS

On the Air February 9th, 1922, with first commercial broadcast.

BASEBALL SCORES!
End Each 3 Innings
Each Major League Game
KFEL - KVOD
— DENVER —



NAB CONVENTION

★ ★ ★ ★ A COMPLETE BROADCAST STATION installation will be on display at the NAB convention in Chicago July 6, 7 and 8. A cordial invitation is extended to broadcasters to inspect the equipment and to discuss their requirements with members of the company's staff.

COLLINS RADIO COMPANY

CEDAR RAPIDS, IOWA ★ NEW YORK, 11 West Forty-Second Street

EVERYWHERE!

● There is *no* place that Postal Telegraph cannot reach. Postal Telegraph not only covers 70,000 cities in the United States and 9,000 in Canada,* but it maintains its own telegraph offices, attended by a trained *telegraph* personnel in cities between which 95% of all the telegraph traffic of the country flows. There is no place for which Postal Telegraph will not accept and transmit your message with promptness...with dependability...with accuracy. Postal Telegraph not only offers efficient telegraph service within the borders of this country but through the great International System of which it is a part, it offers communication with the entire world...through the only combination of telegraph, cable and radio service under a single management in the United States.

*In Canada, through the Canadian Pacific Railway Telegraphs

THE INTERNATIONAL SYSTEM

Postal Telegraph

Commercial Cables · All America Cables · Mackay Radio

Skinner Scans Future for RMA

(*Continued from page 41*)

will depend to a very large degree on the movie and talkie producers for the production of films for television broadcasting. The required technique is the same.

Five-point Plan

RMA has tried to crystallize the basic needs of television in a five-point plan. The five points are given below in brief and will be developed in more detail later in this report.

1—One single set of television standards for the United States, so that all receivers can receive the signals of all transmitters within range.

2—A high definition picture approaching ultimately the definition obtainable in home movies.

3—A service giving as near nationwide coverage as possible.

4—A selection of programs, that is, simultaneous broadcasting of more than one television program in as many localities as possible.

5—The lowest possible receiver cost and the easiest possible tuning, both of which are best achieved by allocating for television as nearly a continuous band in the radio spectrum as possible.

In Europe, television is being directly sponsored by governments, which have committed themselves to establishing a service for their citizens. In the United States, there is little talk of government sponsorship of television. Development costs here have to date been borne entirely by private American industry. RMA believes that this potentially great new force in public life should develop along the sound lines of private initiative and private enterprise with full and free competition in the public interest, and with only such regulation by the government as is necessary to conserve the public interest.

Although we already have spent millions of dollars in research and have made much progress, television is still not ready for the public. A commercial service is probably several years off—for reasons that will be given. However, now is the time to stake out the space in the radio spectrum to give television room to develop and to establish basic technical standards as a guide for further research and development.

We believe our technical progress to date in television is at least as great as in any country in the world. However, due to the large area of the United States and the lower density of our population the problems of providing a nationwide service are greater here than in Europe. Perhaps more space in the spectrum must be allocated to television in the United States. Certainly more stations must be provided to cover the United States than to cover any one European country. But RMA believes that the problems can and will be solved and that the American public can look forward to a regular television broadcast service, in the future, with the same confidence as the public in Europe.

RMA has, of course a selfish interest in television. With the addition of television, the radio market should be greatly enlarged.

We must plow a lot more money into television before there is any hope of taking any out. We realize that it may be years before anyone makes any money in television and that in the meantime we must continue to spend a great deal of money in research and development.

But beyond the profit which we hope will ultimately come out of television, we see in television an opportunity to make a big contribution to the prosperity of the whole country, an opportunity to do our share toward the elimination of unemployment. RMA views television ultimately as a business, a business which will employ many thousands of people in the production and operation of broadcast equipment, in the production of receiving sets, in the production of daily programs, and in the fields of distribution and service. Television, we believe, is one of the new businesses the country needs to create new jobs.

RMA is going to take a lot of pride, also, in helping to build a service which promises so greatly to enrich the life of the American people. Radio today is a great source of entertainment and education. Television will be an important expansion of the service of radio.

Gradual Growth

FROM the economic standpoint it is probable that the spread of commercial television broadcasting over the United States will be gradual, extending over many years. Obviously, the higher the density of population, the better the chance of supporting the cost of a broadcasting station and cost of operating it. Both costs will probably be high. We may thus expect to see television broadcasting at first in only the larger cities with expansion into the smaller centers taking place gradually, as

WIL

THE PIONEER COMMERCIAL STATION IN ST. LOUIS

FIRST in St. Louis to broadcast Baseball Play by Play.

Speaking of Surveys
out of 100 calls—53 Radios were in use
52 of the 53 were tuned to
1000 Watts 1260 Kc. **KGVO** MISSOULA MONTANA
A Popular Radio Station

the technique of operation is perfected.

With the service range of the average transmitter limited to 25 or 30 miles, it is going to be difficult to bring television to all rural areas. Nationwide coverage for some time to come may be defined as coverage of towns of 10,000 population or over.

However, it is possible, as numerous beam relay chains are installed, crossing and criss-crossing the country in all directions, that a large number of small intermediate receiving areas can be created along the beams which will cover in the aggregate large areas of rural and semi-rural population.

In the laboratory, television experiments have reached a promising stage. Much work has been done in the RCA Laboratories in Camden, in the Philco Laboratories in Philadelphia, in the Farnsworth Laboratories in Chestnut Hill, Pa., in the Hygrade-Sylvania Laboratories in Emporium, Pa., in the Hazeltine Laboratories in New York, and in the General Electric and Westinghouse and Bell Laboratories.

Outside the laboratory, experimental high-definition television broadcasts have been on the air for some time from the Philco Radio and Television Corporation television transmitter in Philadelphia, and from the RCA-Victor television transmitter at Camden, N. J., and this summer experimental high definition broadcasting is scheduled to begin from the Empire State Bldg. in New York City.

Within the summer an increased number of test receiving sets will be in use by engineers of RCA, Philco, and probably others.

As these receivers are used daily, from a multitude of locations near to and far from the television transmitters, it will be possible to gain information sufficiently extensive and sufficiently like actual consumers' usage to discover the extent of the commercial service that can initially be rendered and the "bugs" which must be worked out of the equipment before receivers can safely be bought by the public.

Unlike sound broadcasting, television cannot "feel its way" through the early stages of its commercial growth. As sound broadcasting improved, even the earliest radio receivers could still receive after a fashion. That is not necessarily true of television. Unless tentative standards are now set, and later confirmed by extensive field tests under all sorts of conditions, receivers might be built and sold to the public which would be completely obsoleted within a year or two. Commercial television must be born "full grown".

RMA believes that television service to the general public in their homes is feasible only over the air. The tremendous cost of coaxial cables, capable of carrying the wide frequency range necessary for high definition pictures would seem to eliminate the possibility of a television service to homes over wires.

However, coaxial cables may prove to be of great use, along with the radio television relay stations, in connecting television broadcasting stations for chain programs.

Basic Standards

RETURNING to the RMA five-point plan:

1—**Uniform Standards**—The engineers of the radio industry have held many meetings under the auspices of RMA and have arrived at practically complete agreement on basic television standards. Nine basic items have been covered, laying the groundwork for future television developments, all pointing to the same goal, namely, one single system of television for the whole United States, with every receiver capable of receiving every broadcast reaching its locality.

2—**High Definition Pictures.**—RMA recognizes the necessity of a high definition picture as the basis for sustained public interest and approval. The American public is familiar with home movies. It will expect television pictures to compare favorably with home movies. This is a difficult requirement to meet. At best it will take time to achieve. To make it possible at all, requires between 440 and 450 lines per picture, necessitating a channel width of 6 mc.

It is somewhat startling to find that, for the quality of picture the American public will demand, each television channel must thus be 600 times as wide as the ordinary sound broadcast channel of 10 kilocycle width, or expressing it in perhaps still more startling fashion, that a single television channel must be approximately six times as wide as the whole present standard sound broadcast band of 1060 kilocycles and 106 channels.

3—**Nationwide Coverage.**—It is not easy to find sufficient space in the radio spectrum for enough television channels to provide nationwide coverage, especially since consideration has to be given to what are believed to be the necessities of services other than television.

The most valuable part of the spectrum for television starts at 42 mc. At this frequency a given amount of broadcasting power provides the greatest signal intensity in the surrounding territory. The RMA Television Committee report will request therefore a television band extending from 42 to 90 mc.

From 56 to 60 mc. there is a band allocated to amateurs. RMA recognizes the service the amateurs have contributed to radio development and their importance to the nation in providing a reserve of trained radio operators in times of emergency. RMA will therefore not request these frequencies for television unless it is found by the Commission that this band is not urgently needed by the amateurs, or is not especially well suited for amateur work. If so, another desirable television channel could be provided from 54 to 60 mc. and a highly desirable continuous television band would result.

Frequency and Power

TELEVISION has had its greatest development to date at frequencies toward the 42 mc. end of the band requested. However, research work is in progress in the section toward 90 mc. It is known that as the frequency increases the amount of power required to provide a given intensity of signal increases tremendously. Much more power is required at 90 mc. than at 42 mc. Moreover, poor reception areas, in the so-called shadows produced by tall buildings, increase greatly as the frequency increases.

It is confidently believed, however, that the upper channels toward 90 mc. will be very useful in establishing broadcasting in localities where the area to be covered is not too great, and where not too many tall buildings are present, whereas the channels toward 42 megacycles will provide the greater signal strength and penetration necessary to cover large metropolitan areas.

Without the Amateur band, the space from 42 to 90 mc. provides seven television broadcasting channels. This is probably not enough for a nationwide television service, because it is doubtful whether stations on the same frequencies can be located closer than several hundred miles without interference.

It is definitely known that a useful signal may be received at any point where an unobstructed line of sight exists between the receiving antenna and the transmitting antenna. It seems probable that the service range may extend somewhat beyond this visual horizon. But the signals have an interference range much

A. A. U. BASKETBALL TOURNEY
Broadcast Exclusively By
KFEL - KVOD
— Denver —
(Sponsored by Chevrolet)

THERE IS NO SUBSTITUTE FOR EXPERIENCE

We Were the Pioneers—
IN — Field strength surveys— Site location studies and tests— Synchronization developments.

We Prepare—
Coverage reports and surveys that are modern and embody present standards.

We Design and Install—
Directive antennae to increase coverage and reduce interference.

We Make—
Interference measurements with special and patented equipment.

★

GLENN D. GILLETT
Consulting Radio Engineer
National Press Bldg. Washington, D. C.

"A" CUT CRYSTALS

For immediate delivery: broadcast band crystals with temperature coefficient less than three parts per million per degree C. Mounted in variable air gap Isolantite holder ---------- $50.00

Also:
A complete line of heater or oven type mountings with bi-metallic or mercury column thermostats, with or without thermometers.

HOLLISTER CRYSTAL COMPANY H MERRIAM, KANSAS

greater than their service range.

At many times the signals persist for considerable distances beyond the useful service range. They must be reckoned with over a much greater area from the standpoint of interference. In the absence of practical experience to date on any large scale, it will be necessary to assume that signals from any station may cause interference with another station on the same channel several hundred miles away, the distance varying with the power output of the respective stations, the topography of the intervening country and the height of the transmitters.

It must be assumed that if a given channel is assigned in Boston, that channel cannot be assigned to any other center nearer than Philadelphia, and any channel assigned in New York cannot be assigned again any nearer than in Baltimore or in Buffalo. Similarly, any channel assigned in Cleveland probably cannot be assigned in Toledo, Akron, Youngstown, Buffalo or Detroit.

Separating Stations

IT IS NOT LIKELY, at least in the early days of broadcasting, that adjacent television channels can be assigned in the same city, because of probable interference. Only field tests on a large scale and over a long period of time will finally determine the necessary separation of frequency assignments in the same locality.

Seven television channels may prove insufficient to provide television service to all the urban centers in the United States.

But, however idealistic it may seem, we must make nationwide television service our ultimate goal. Perhaps nationwide service can never be 100% achieved, but to keep the possibility of it open, much additional space in the spectrum above 90 megacycles must be reserved for experimental purposes.

RMA should prefer that the additional space be continuous from 90 megacycles, but we recognize that other services probably have legitimate needs in that part of the spectrum.

RMA therefore will ask for an experimental television band starting at 120 mc. This is required to provide space for television relaying and television pick-up from the field to the transmitter, as well as much needed space for additional broadcasting channels in the future. But it is practically virgin territory and a vast amount of research must be done before television broadcasting becomes a reality at these frequencies.

RMA believes, however, that the technical problems must and will be solved and it asks for the full right to experiment from 120 mc. upwards. Unless these frequencies are held open, we are afraid that the door to adequate nationwide television might be forever closed.

4—A Selection of Programs.—The public should have a selection of television programs. To maintain competition and avoid monopoly two or more simultaneous programs in most localities would seem to be a prime requisite.

It will be difficult enough to provide nationwide coverage on a single program basis. It will be much more difficult to provide two or more simultaneous programs in a locality.

The evident desirability of such multiple program service further emphasizes the necessity for more than seven channels and the necessity of providing space for further experimenting above 120 mc.

Two Receivers in One

5—Low Cost and Ease of Tuning.—It cannot be expected that the cost of a television receiver will ever approach the low cost of a sound radio receiver. In the first place, a television receiver is inherently very much more complicated. In the second place, it must receive not only the picture, but also the accompanying sound, so that a television receiver must be two receivers in one.

Neither can it be expected that a television receiver can ever have as simple tuning controls as a sound radio receiver. A television receiver must have all the controls necessary for a sound radio receiver plus an additional set of controls required for television.

However, both cost and ease of tuning are helped materially if continuous or nearly continuous bands in the spectrum are allotted to television.

Cost of Receivers

IT IS too early to state very definitely the cost to the public of a television receiver. In England it is predicted that receivers, when ultimately available to the public, will sell for about $500. Whatever the initial cost, it should come down as the art progresses, just as the cost of sound radio receivers has come down. However, it is beyond all bounds of possibility to expect that the cost of television receivers will ever come down anywhere near the cost of sound radio receivers. Television receivers will always be very much more complicated and correspondingly more costly.

However, RMA is convinced that even at the fairly high prices which will be necessary, television receivers will be bought in large numbers. The standard of living of the American people will continue steadily to increase. It is no more daring today to visualize millions of television receivers ultimately in use than it was in 1900 to visualize millions of motor cars in use, or in 1920 to visualize millions of sound radio receivers in use.

But just as it took ten years or more for the automobile to come into general use, and nearly that long for sound radio, RMA believes that at least ten years will

GRADUATES—Here are members of the graduating class of Capitol Radio Engineering Institute, in Washington, as well as guests, at the annual commencement banquet held June 6 in Washington.

WIL

THE PIONEER COMMERCIAL STATION IN ST. LOUIS

FIRST in St. Louis to broadcast Election Returns.

WSPD

TOLEDO'S ONLY RADIO STATION

A BASIC COLUMBIA OUTLET

5000 WATTS DAY
1000 WATTS NIGHT

National advertisers know from experience that WSPD must be used to get Blanket Coverage in this market of over a million and a half.

WSPD TOLEDO OHIO

STUDIOS COMMODORE PERRY HOTEL TOLEDO, OHIO

TRANSMITTER PERRYSBURG, OHIO

WE CAN IMPROVE YOUR PROFITS

Many opportunities exist for increasing Profits of broadcasting stations. Better realization of present sales potentials. More efficient organization. More economical operating practices. Better planning for future growth.

Through impartial survey of station organization, we develop neglected sources of revenue; strengthen weak points in policy and procedure; eliminate unprofitable practices. We also make special studies of budgets, business systems, sales and promotion, personnel, taxes, depreciation, etc.

Ten years experience in management and reorganization work assures a practical viewpoint.

For firms desiring to establish new stations, we have complete data on investment and economic needs of stations.

Inquiries invited. References furnished on request.

ALEXANDER SHERWOOD

Business Consultant in Broadcasting

320 N. 50th Street Omaha, Nebraska

be required to bring television into general use.

Not only have the American people shown an appreciation of improvements in their standards of living, but they have shown a natural ability to assimilate inventions and improved customs and radically to change important habits of living in a decade or two. They have shown the ability to get what they wanted and to finance what they wanted to get. When one reviews the fact that the purchases of tens of millions of motor cars have been successfully financed, and the average motor car represents a bigger investment than will the television receiver, it does not seem beyond the bounds of reason to assume that the people will ultimately find ways and means of purchasing a correspondingly large number of television receivers, if enough radio channels are now set aside to permit television broadcasting to develop ultimately into a nationwide service.

Public Wants Television

IT IS not likely at this time that any of us can predict in detail the ultimate television broadcasting structure. We are not sure either of all the technical limitations on the one hand, or on the other hand, of new technical discoveries which will permit a greater service than we dare assume in our present state of knowledge. We are not sure how station costs and operating costs can be covered, nor how many stations can be supported in a given locality. If we wait to make a start until all these unknowns have been eliminated, we shall probably never start.

In the opinion of RMA, the FCC has in television a great opportunity and a great responsibility. Here is an impartial body with no interest to serve except the public interest. The public is already keenly aware of television. The public not only wants television, but it expects television, and it seems to be getting somewhat impatient over the long time it is taking to work it out.

RMA asks the Commission for approval of the principles of its Five-point Plan. We ask the Commission to stake out now for the public enough television space in the radio spectrum to keep open the possibility of a nationwide television service.

After a further period of experimentation, in the laboratory and the field, the Commission will have the responsibility of making definite broadcasting assignments, assignments that will insure the greatest possible service to each locality, assignments that will not lead to any monopoly, assignments which will preserve the American system of competition, but which will prevent the creation of so many competitive stations that none will have enough revenue to provide fine programs.

RMA feels that the FCC will supply the flexibility necessary to allow television broadcasting to grow, and at the same time keep firm control of the situation, so that it will not get out of hand, as radio broadcasting threatened to do before the days of the Federal Radio Commission.

KLZ's BIG PICNIC
Thousands Frolic in Park and Get Free Amusement

NEARLY 5,000 people responded to the invitation of KLZ, Denver, to attend a Radio Picnic on Sunday, June 14. The only promotion given the picnic was a series of brief announcements informing the public that tickets were available at KLZ's studios and at a number of stores throughout the city. Each person requesting the tickets was given as many as he desired. The ticket contained a free admission stub, one which entitled the guest to free ice cream, a free merry-go-round ride, and three hours of dancing. In addition to these, were half-rate stubs to any ride in the park.

Highlight of the affair was a 45 minute Meet-the-Artists program which was also broadcast. A number of KLZ artists were introduced and each performed. The announcing staff was introduced and interviewed by Wesley Battersea. A large number of the guests, attracted by free picnic grounds, brought their own lunches which they supplemented with the free ice cream. About 6,000 packages of ice cream were distributed to adults and children.

KFVD, Los Angeles, purchased several weeks ago by J. F. Burke, formerly of Santa Ana, Cal., and associated interests, from the owners of KFAC, was taken over by its new owner June 15 following approval of the transfer by the FCC.

Trade Commission Actions

THE Federal Trade Commission has filed complaints alleging unfair claims for products of these advertisers: Bourjois Inc., and Barbara Gould Sales Corp. (Evening in Paris cosmetics etc.); No-Doz Laboratories Inc., San Francisco (NoDoz Awakeners); Federal Enameling & Stamping Co., McKees Rocks, Pa. (kitchenware): Stipulations to revise claims have been signed by the following advertisers: Pompeian Co., Bloomfield, N. J. (cosmetics); Chocolate Products Co., Chicago (Stillicious).

AMERICAN missionaries in Shanghai have asked and secured permission from the Kellogg Co. and Ireene Wicker to present Miss Wicker's *Singing Lady* scripts in both Chinese and English.

Linton Expands Service

RAY LINTON, Chicago representative, has been appointed branch manager in Chicago and the Midwest for WIP, Philadelphia, in connection with similar responsibilities for station WMCA, New York City, also o the Inter-City Group. The Inter-City Group, according to Mr. Linton, is now carrying 18 hours daily of sponsored chain programs, including its latest acquisition, True Story's *The Good Will Court* which came on the air early in June and which is also carried by Mutual. Before he opened his own office as station representative a year ago, Mr. Linton was a salesman for WBBM, Chicago, and later vice president of Greig, Blair & Spight, Chicago.

EWAY ONTDAY AVEHAY OTAY EEKSPAY IGPAY ATINLAY!

Whether we're talking to a local merchant or to a *national* advertiser, we don't have to stutter! With Station WAVE you get 100% potential coverage of the richest market in Kentucky, plus a good coverage of secondary markets. You do not have to pay for sending a high-powered signal into remote reaches and fastnesses. You get all the benefits of being on the *only* near-by station that carries N.B.C. features. And the cost is low.

If you're judging stations by *results per dollar of expenditure*, we believe we can prove to you that WAVE ought to be 'way up near the top of your list.

National Representatives:
FREE & SLEININGER, INC.

STATION WAVE
INCORPORATED
LOUISVILLE, KY.
1000 WATTS . . . 940 K. C.

NAB Conventioneers . . .

Universal's new professional RECORDING MACHINE, DISCS and ACCESSORIES and MICROPHONES will be DEMONSTRATED by staff engineers at The Stevens during the NAB Convention.

See

Dr. Ralph L. Power, advertising manager of Universal, at The Stevens.

Or

L. G. Cushing, Chicago representative, room 513, 540 No. Michigan Ave., 'phone Delaware 1561

UNIVERSAL MICROPHONE CO., Ltd.
424 Warren Lane **Inglewood, Cal.**

Editorial Hour Wins

LARGELY because of the enormous popularity of the *Atlanta Journal's Editorial Hour* over WSB, a Friday evening half - hour during which the editorial page of that newspaper goes on the air with the editors doing a colloquy, the *Journal* last month was awarded the Georgia Press Association's annual prize for editorial excellence. Even the Associated Press, never too liberal toward radio, in its story paid tribute to the radio feature.

WIL

THE PIONEER COMMERCIAL STATION IN ST. LOUIS

FIRST in St. Louis to broadcast Police Releases direct from Police Headquarters.

Jolliffe Discusses RCA's Television

(Continued from page 44)

continued, "that to obtain a satisfactory television picture a signal strength of 1 millivolt or more is necessary and, as in every other case of radio reception, a small percentage of interference can be tolerated. It appears that above 40,000 kc. this interference will be occasional and will probably occur during the time of day when television programs are of the least interest."

Today, Dr. Jolliffe said, the limit of commercial vacuum tubes capable of radiating high - power television signals is something of the order of 60,000 kc., but it is expected that research will increase this limit. He suggested a continuous band up to 90,000 kc., as RMA proposes, so that an efficient single dial receiver can be manufactured to cover the entire band with tubes of current design. He also concurred in the RMA recommendation that additional bands above 120,000 kc. be allocated for television research, to be used during the early stages of development of the 42,000-90,000 kc. band for short distance relaying of programs such as is done in sound broadcasting.

"We realize," Dr. Jolliffe concluded, "that this presentation is sketchy and full of estimates and approximations. However, we just haven't advanced far enough to do anything else. RCA expects to be able to answer many technical questions more definitely within the next few months. We ask now that sufficient space be reserved in the frequencies which we believe to be suitable for television in order that television may be made available in the United States. When and if television is far enough advanced to receive general acceptance, its development should not be hampered by the necessity of displacing other services."

Replies to Questioning

THE Jolliffe television presentation occupied an entire afternoon session, with Comdr. Craven starting the questioning by asking whether, if television occupies such a huge chunk of the spectrum with its 6 mc. bands, other services could also be accommodated in those bands. Dr. Jolliffe replied that if they are sufficiently remote, such as extremely low power ship or forestry stations at least 200 miles away from a transmitter, they might be—but he thought, it would be poor policy to permit any such services. Asked whether any other methods than cathode ray scanning were available, Dr. Jolliffe asserted that mechanical scanning is available but that, along with the RMA, he favored one standard for all systems.

Asked regarding rural coverage, Dr. Jolliffe admitted that the proposed setup favors the cities at the outset. Comdr. Craven wanted the speaker's opinion on utilizing the intermediate bands around 2,000 kc. (which under pending new regulations are to be abandoned by their present television experimental occupants) and Dr. Jolliffe replied that the band widths there available are not enough for high definition comparable to home movies, which he said will alone be acceptable to the public.

"If we do not allocate anything to television below 100,000 kc.," Comdr. Craven asked, "what will be the effect on the art?"

"We'll have to start all over again," Dr. Jolliffe replied.

Commissioner Sykes wanted to know why the proposed system offered no rural coverage, and Dr. Jolliffe replied that it was due to the extremely limited area of reception of any one transmitter. Since transmission is limited to the horizon, he said, it would mean that stations would be required every 40 miles or so and this would entail enormous costs. He frankly asserted that television's service at the outset may be confined to the big cities.

Commissioner Stewart pointed out that the RMA and RCA were asking for something like 57% of the channels under consideration, and Dr. Jolliffe agreed that this was so.

Capt. Hooper pointed out that the seven available 6 mc. bands would be quickly used up by any system of master and "booster" stations since one band was needed to receive and another to transmit. Dr. Jolliffe admitted this, too, was the case but he insisted that "we must have reception that is good." Pressed by Capt. Hooper, who represents the government committee which is itself seeking something like 53% of the frequencies between 30,000 and 200,000 kc., Dr. Jolliffe agreed that television asks a great share of the bands and offers a relatively limited service, but he asserted that this is one of the barriers of high-definition television that cannot be overcome as yet — and he added that further developments beyond 120,000 kc. might expand the service in the future.

CALDWELL ELECTED BY RADIO LAWYERS

Mr. Caldwell

LOUIS G. CALDWELL, Washington attorney, was elected president of the Federal Communications Bar Association at a dinner-meeting held in Washington June 17. Prime mover of the venture, Mr. Caldwell has served as chairman of the organization committee for the last several months. He was the first general counsel of the Former Radio Commission in 1927.

Sixty - nine lawyers regularly practicing before the FCC and its divisions joined the organization following the dinner meeting. The purpose is to "promote the proper administration of the Communications Act of 1934 and related Acts, to uphold the honor of practice before the FCC and to encourage cordial intercourse among those practicing before the FCC."

In addition to Mr. Caldwell officers elected to serve for the year beginning July 1 were Ralph Kimball, Western Union attorney, vice president and George O. Sutton, Washington attorney, secretary-treasurer. The executive committee elected comprises Duke M. Patrick, former FCC general counsel, and Frank D. Scott, Washington attorney, for three years; Frank Quigley, A. T. & T. attorney, and Paul D. P. Spearman, former FCC general counsel, for two years, and Philip Hennessey, NBC Washington counsel, and Ben S. Fisher, attorney, for one year.

The dinner was addressed by Walter M. Bastian, president of the District of Columbia Bar Association, and Frank Roberson, assistant general counsel of the FCC.

Barbasol on NBC

WASEY PRODUCTS Inc., New York (Barbasol) will begin its fall radio schedule Sept. 4, using an NBC-Blue network, Fridays, 8:15-8:30 p. m. The basic network program will be broadcast at this time, with rebroadcast to KLO, Ogden, and the Pacific Blue network at 11:30-11:45 p. m. Singing Sam will be talent as in the past. It is the first time Barbasol has used NBC. The program will originate from WLW, Cincinnati, and is signed for 39 weeks. Erwin, Wasey & Co. Inc., New York, has the account.

EDDIE and Fannie Cavanaugh, broadcasting the Illinois Meat Co. program over WBBM, Chicago, have earned for themselves the prestige of being the oldest man and woman team on radio, in years of radio service, west of the Alleghenies.

DOUGLASS DOOLITTLE, President

Salesvertising
ASSOCIATES
224 SOUTH WELLS STREET
Chicago

May 6, 1936

Mr. James F. Hopkins,
Station W J B K,
Detroit, Michigan.

Dear Mr. Hopkins:

Have just checked my record of results for the series of six (6) one minute announcements your station ran for our client, the Stainless Steel Products Company, and arrive at the amazing total of 3,665.

They wanted returns and it looks like they got them. I have already, at Mr. George Roesler's request, jacked them up on getting the gift cards out. Just between you and me I think your station pulled so well that we caught them short and will report to you what I hear from them.

Sincerely yours,

SALESVERTISING ASSOCIATES, Inc.

By Albert E. Russell

A.E.Russell:fhp

FOR KANSAS CITY COVERAGE
WREN
"A Bird in the Hand"

Department Stores to Expand Radio Schedules, AFA Is Told

Public Utilities Can No Longer Get Along Without Broadcasts, Official of Utility Company Says

(Special to Broadcasting)

BOSTON, June 30—More department stores will increase their radio advertising budgets during the latter half of the current year than will add to their expenditures in any other major medium, it was revealed by Dr. Herman S. Hettinger, Assistant Professor of Marketing of the University of Pennsylvania in an address before the Sales Promotion Division of the National Retail Dry Goods Association held here in connection with the Advertising Federation of America convention.

Mr. Grant

Of approximately 100 stores questioned by the Association, 35% planned to increase their radio advertising appropriation, 17% to reduce it and 48% to leave it unchanged.

Utility Radio Session

Mr. McCarty

A RADIO feature of the AFA convention was the Public Utilities Advertising Association conference, June 30, at which Will C. Grant, advertising director, Lone Star Gas Co., Dallas, was slated to lead a discussion on the use of broadcasting.

Speaking for American Gas Association, and its Regional Advertisers Inc., Charles W. Person, secretary of Regional, was to describe how gas utilities are successfully using the *Mystery Chef* network and transcription series. [See text of his prepared address on page 62.]

Clarence L. Davis, vice president, Batten, Barton, Durstine & Osborn Inc., New York, and account executive for Niagara Hudson Power Corp. and subsidiaries, was to describe cooperation of local utilities with the General Electric Co.'s *Melody Mastery* series last winter on an NBC network, using the 11 p. m. hour on Sundays. The program attracted wide attention in advertising circles because it was broadcast at such a late hour.

Public utilities can no longer afford to overlook radio as an advertising medium, in the opinion of R. S. McCarty, manager of the advertising department of Philadelphia Co., Pittsburgh. Mr. McCarty was to explain how the Philadelphia Co. merchandised its broadcast series.

Others scheduled to speak were Henry Obermeyer, Consolidated Edison Co. of New York, and Arthur P. Kelly, Rochester Gas & Electric Co.

Inter-City Group carried a number of addresses from the main convention session, keyed from WMEX, Boston.

A plea was made by Dr. Hettinger for a greater understanding on the part of retailers and broadcasters alike of each others problems, which, it was stated constituted the greatest problem in the retail radio advertising field today. Dr. Hettinger also pointed out that department stores had lagged behind the general retail field in adopting radio, and said that during the first four months of the current year increases in radio advertising over the corresponding period of 1934 by various types of retail outlets had been as follows: Automotive retailers 102%; clothing and apparel shops 80%; housefurnishing retailers 52.6%; foodstuffs 27% and department stores 21%.

"Radio must be able to effect sales for retail stores or also these smaller stores, with limited budgets and needing to strain every dollar to the utmost, could not have employed the medium to the degree and with the consistency which they have done," said Dr. Hettinger.

A Versatile Medium

RADIO was described as a highly versatile medium, able to be applied in the retail field for a variety of purposes. Bargain sales, the advertising of merchandise in the regular price lines, the promotion of special sales, advertising designed to bring people into the store, the building up of specific departments and portions of the store, the creation of store individuality and personality through the dramatization of store policies, service and points of distinction, tieing in with the advertising of manufacturers, and stimulating the morale of the sales force were among the uses cited by Dr. Hettinger. These, he claimed, already had been used by enterprising retailers scattered throughout the country.

The ability of small stores to begin with radio advertising and to increase their efforts as their business expanded was stressed particularly by Dr. Hettinger. One instance was cited of a Michigan food store which began radio advertising less than two years ago. At this time the store enjoyed a weekly business of $500. With no other medium than radio, it succeeded in building up its revenues to an average of about $6,000 weekly.

Several rules were set forth by Dr. Hettinger as guides to successful radio advertising.

"1. Please visualize radio in relation to the entire store promotion problem. Too much retail radio advertising is done piece-meal.

"2. Be certain to coordinate radio advertising with other promotion.

"3. Educate your buyers and merchandising executives as to the value of radio advertising. Since most of them are limited in experience to newspaper advertising it is only natural that they should prefer to spend their money in a medium which they know. Unless you break down buyer resistance you cannot expect to get the most out of radio.

"4. Do not burden specific departments with your radio advertising costs at the outset. Consider it as a portion of the general store budget until it has proven itself. Then treat it as other media.

"5. Either spend enough money and broadcast regularly enough to do a thorough job or stay out of the medium. It would be best for both radio and retailing if the half-hearted broadcast advertiser would stay away from the medium.

"6. If you get into radio see to it that you have adequate organization to do so.

"Finally, approach radio experimentally and open-mindedly. As Mr. Oreck told the AFA convention in Chicago last year, I do not believe the most optimistic broadcaster or retailer has any conception of the value of radio as a retail advertising medium."

Praise From Prall

ALFRED J. McCOSKER, chairman of the board of Mutual network and WOR president, opened radio proceedings at the Democratic convention in Philadelphia by introducing Anning S. Prall, FCC chairman, from the Mutual convention studio. Mr. Prall congratulated networks on their elaborate pickup arrangements and said "the marvel of radio will enable millions who could not otherwise be present to attend this marvelous event. My observations of the radio facilities which have been set up lead one to believe your listening facilities will be perfect."

WANTED

Radio Director

By Advertising Agency

To a Radio Director controlling some billing of his own, a well-financed first-rate small New York Agency offers the opportunity of heading and building up its Radio Department. Some of present accounts provide opportunity for radio development and other close contacts involve similar possibilities.

Thorough knowledge of program building, time, talent, etc. necessary.

The Agency offering this opportunity will be found a congenial, cooperative place in which to materialize your own possibilities. For interview, address in confidence:

BROADCASTING
Box 508

ENCEPHALITIS LETHARGICA

Does RADIO suffer from it at certain times of the year? Not at KFNF in Shenandoah, Iowa!

The Tom Mix Circus played Shenandoah on June 11th, this year. Arrangements were completed just 24 hours ahead of the show, for a radio interview with Tom Mix himself. Using just six "station break" announcements to plug the event found the spacious KFNF main auditorium with all seats taken an hour ahead of the program. Thirty minutes before Mix was to appear, the SRO sign was hung out. When Mix made his appearance, the main studio (will hold 60 people) was jammed and an overflow crowd was waiting in the street. A conservative estimate placed the number of children at between 800 and 1000, besides the grown folks who, "came to bring the children".

KFNF is a "12 months, year-round" station and in all its life has never had to contend with SLEEPING SICKNESS, summer or winter. The advertiser on KFNF gets full attention of the KFNF audience at any and all times of the year.

KFNF INCORPORATED, SHENANDOAH, IOWA

"The Friendly Farmer Station"

SELL ALL SOUTH CAROLINA

5000 WATTS G. RICHARD SHAFTO MANAGER

WIS COLUMBIA

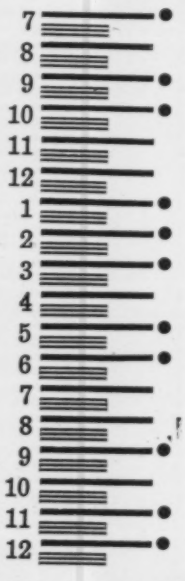
560 KILOCYCLES FREE, JOHNS & FIELD, Inc. NAT'L REPRESENTATIVES

Earle Tyler

EARLE TYLER, 30, NBC engineer assigned to the GOP convention at Cleveland, was drowned June 14. He was cruising on Lake Erie with friends on the *Dolphin*, falling from it into the lake. With him on the cruise were George McElrath, NBC operations engineer and wife; Dale Disbrow, WTAM operations supervisor and wife; Edward Leonard, WTAM engineer in charge and wife; Mr. & Mrs. Clarence Davis, owners of the boat. Tyler fell off the boat in choppy water and failed to keep his hold on a life preserver thrown by McElrath. Members of the group dove repeatedly but failed to find him. The body was recovered later. He is survived by his widow, parents and two sisters. Recently he had been transferred from Hollywood to Radio City.

JUST THE SPOT!
FOR THOSE ONE-MINUTE TRANSCRIPTIONS
KFEL-KVOD NEWS SERVICE

NEWS WHILE IT IS NEWS
ON THE HOUR— EVERY HOUR!
7 A.M. TO MIDNIGHT



• INDICATES SPOTS AVAILABLE FOR 1-MINUTE ANNOUNCEMENTS DURING NEWSCASTS AT $10.00 EACH. LESS QUANTITY DISCOUNTS.

WORLD-WIDE COVERAGE BY TRANSRADIO PRESS SERVICE

GENE O'FALLON
Sales Manager
Albany Hotel
DENVER

SUITE NO. 2340A
STEVENS HOTEL — CHICAGO
DURING N. A. B. CONVENTION

GETTING TOURISTS TO LISTEN

WCCO and State Bureau Cooperate to Inform Visitors Of News Broadcasts and Other Programs

THE Minnesota State Tourist Bureau in cooperation with WCCO, Minneapolis, and the *Minneapolis Star*, recently sent bulletins of WCCO's daily schedule of news broadcasts to all Minnesota summer resorts and summer hotels. The Gopher State is expecting a record-breaking tourist season for 1936, and many resorts are experiencing the heaviest reservations in their history. Many of these Minnesota summer vacation resorts are in isolated spots reached by daily newspapers 6 to 24 hours after they are published. Last year, WCCO sent out a schedule of its news broadcasts to several resorts and they were received with such enthusiasm that this year, in conjunction with the State Tourist Bureau, a special bulletin was provided for every resort and summer hotel in the state.

WCCO has also cooperated with the Tourist Bureau for the last 3 years in presenting weekly broadcasts concerning the attractions of the 10,000 lakes as a vacationland. In issuing the news broadcast schedules, the Minnesota Tourist Bureau sent the following to all resort owners:

"Herewith is the Newstime schedule of radio station WCCO for posting at your resort or in your clubrooms for the convenience of your guests and visitors. You are also invited to listen in every Saturday at 5:30 p. m. to the broadcast of the Minnesota Tourist Bureau over the same station. As most of you know WCCO has cooperated whole-heartedly for the past three years in giving its time in behalf of Marvelous Minnesota through the Bureau. If you have any newsworthy items which will fit into the Tourist Bureau program, send them in. And if you appreciate this generous gesture on the part of WCCO, please drop a line to Earl Gammons, general manager of WCCO, Hotel Nicollet, Minneapolis, Minn. Thank you—and don't forget to post the newstime schedule of this cooperative station."

Vocal Dexterity

DON MIHAN, NBC sound effects expert, Chicago, had a tough assignment June 20 during the NBC-Red *Saturday Jamboree*. It was his duty to perform the multiple role of baby-bear-lion-tiger-dog-owl-elephant in a musical dramatization. The role was required for a network dramatization titled "Baby at the Zoo". Mihan served as baby and zoo. He often frequents the Chicago zoo to learn how to imitate animals.

First World-Wide Series Of Broadcasts Arranged

JOINING for the first of a series of world broadcasts planned by the International Broadcasting Union at Geneva, Switzerland. NBC and CBS announced June 22 that on Sept. 22 they will short wave a half-hour program, probably between 2 and 3 p. m., for direct pickup or for relay in all countries of the world. Announcements will be in English, French and German, and the program will also be carried on the combined networks.

Arrangements for the program are being completed by Davidson Taylor, of the CBS program department, and Ernest LaPrade, of the NBC program department, in collaboration with Dr. Max Jordan and Fred Bate, NBC European representatives, and Cesar Saerchinger, CBS European representative. It is planned to open the program with the roar of Niagara Falls, followed by native spirituals and jazz.

Textile Industry Ready

(*Continued from page 37*)

that we fail to complete the actual contact with the customer."

I know one important knit goods firm that has just completed a radio drive involving a considerable outlay. This firm is 100% sold on radio. The sales results were satisfactory beyond the company's most optimistic hopes. Indeed, they are so satisfied that the advertising executive refuses to let me quote him on the results. He says it would just bring all other competing knitters into radio. So far he is the only one in his line on the air. And he wants it to stay that way!

Another thought arises on this score. It seems to me that there is room for a specialized advertising radio service catering to the textile industry alone. Such a service could function as the link between radio and the mill. At present the advertising industry is pretty much at loose ends in servicing mills on radio.

Get the Brand Names!

THE possibilities of textile broadcasting far exceed any reasonable space bounds of this article. However, to the time salesman I would say this: Hit out first and foremost for the brand names. Go after the big ones, that everyone knows. They need broadcasting just as much as you need them. But try to get their views. Get the mill angle. Study the problem from their end. Be textile-minded as far as possible.

You know, we in textiles have a glorious story to tell on the air. We are doing big things—we should tell about them. The problem is—how to tell that story so that it will bring sales results. And radio can help us very materially to accomplish that end. The big essential is that you shall come to us with a plan fitted to our need. Do that, and you may be sure that considerably more than just a few stray dollars from this $3,000,000,000 industry will come your way!

ARE YOU GETTING YOUR SHARE of Western Business?

ARIZONA
CALIFORNIA
COLORADO
IDAHO
MONTANA
NEW MEXICO
NEVADA
OREGON
UTAH
WASHINGTON
WYOMING

Six full-time salesmen calling regularly on all advertising agencies in the Pacific and Mountain states will give you dependable and thorough representation in the West.

WALTER BIDDICK COMPANY
• Station Representatives

LOS ANGELES 568 C. of C. Bldg.
SAN FRANCISCO 1358 Russ Bldg.
SEATTLE 1038 Exchange Bldg.

Staff of Techna Corp. Completed; Branch In New York Is Projected

Mr. Walder

ANNOUNCING its formation last month, the Techna Corp., new firm located at 926 Howard St., San Francisco, and specializing in the design and manufacture of broadcasting, public address and recording equipment, has completed its executive and technical staff headed by Robert B. Walder as president.

Mr. Walder resigned recently from the Remler Co. Ltd., San Francisco, where he was general manager and chief engineer of the broadcast division. Before that he was chief engineer of the moving picture and sound division of M. R. Martin & Co., Seattle. In 1922 he built and operated the old KJC, one of the first broadcasting stations in Los Angeles.

Jack Ellis, for the last year advertising manager of the Remler broadcast division, is promotion and advertising manager of the new concern, which has its own new factory building and plant representing an investment of $60,000. C. E. Downey, recently chief engineer of KROW, Oakland, and formerly with WAIU, KOMA and XENT, is broadcast research engineer and in July plans to establish a branch of the company in New York. Earl R. Jones, formerly with the Lathe Tool Works, San Francisco, is plant superintendent.

Directors of the Techna Corp. are Earl L. Miller, executive secretary of the regional code committee formed by the major oil companies of the Pacific Coast under the authority of the Federal Trade Commission; Sydney S. Clark, division manager of Associated American Distributors, and Arnold L. North, a director of the Production Finance Corp.

WJR Promotes Howlett

ERIC S. HOWLETT, former manager of WAIU, Columbus, and program manager of WHK, Cleveland, has been promoted to program director of WJR, Detroit, after serving the last 18 months as production chief.

Kellogg Expands Series

KELLOGG Co., Battle Creek, Mich. (cereal) sponsoring *Girl Alone*, a journalistic sketch, on WMAQ, Chicago, for several weeks will extend it to eight NBC-Red network stations, Mondays through Fridays, beginning July 13, 12 noon to 12:15 p. m. NBC has been feeding the program to the Red network on a sustaining basis with the commercials cut out and it has met wide audience approval. Stations besides WMAQ are: WWJ, WTAM, WEAF, WEEI, WBEN, KYW, WLW. The program will continue to emanate from Chicago. N. W. Ayer & Son Inc., New York, is the agency.

ACME WHITE LEAD & COLOR WORKS, Detroit (paints, etc.) will use the entire NBC-Red basic network, including WLW, beginning Aug. 30, Sundays, 5:30-6 p. m. The program has no title as yet, but will feature Smiling Ed McConnel, Larry Larson and choral group, and Palmer Clark's orchestra. Program is contracted for 52 weeks. Last year Acme used quarter-hours on CBS networks. Henri, Hurst & McDonald Inc., Chicago, handles the account.

KRAFT-PHENIX CHEESE Corp., Chicago, is broadcasting a summer spot series for its Okey-Doke cheese flavored popcorn, using one-minute morning announcements on four stations in Chicago, WMAQ, WBBM, WGN, WCFL.

WIL

THE PIONEER COMMERCIAL STATION IN ST. LOUIS

FIRST in St. Louis to have its own News Gathering Organization.

SUPREME DISC NEEDLES

100% Shadowgraphed Inspected

F. L. COOK, Western Distributor
606 Parkman Avenue, Los Angeles, Calif.

SUPREME needles are manufactured particularly for the broadcasting and recording trades in TEN different specifications:
Five for playing back acetate, coated, and 15-minute transcriptions of shellac and acetate; *Five* for reproducing phonograph records and shellac transcriptions not exceeding 8 minutes.

PHONOGRAPH NEEDLE MFG. CO., INC.
42-46 Dudley Street, Providence, R. I.

WNOX
Knoxville, Tenn.

★

WCPO
Cincinnati, Ohio

Continental Radio Company
230 Park Avenue, New York City

Affiliated with

Scripps - Howard Newspapers

★

These stations are rendering in their communities the same high degree of public service as their newspaper affiliates.

EXHIBITORS PLAN DISPLAYS AT NAB

MORE THAN a score of exhibits are planned at the Stevens Hotel during the NAB convention July 6-8 by equipment manufacturers, transcription companies and others identified with the broadcasting industry, it is indicated by advance reservations list at the hotel. Ten organizations have reserved sample rooms on the fifth floor of the hotel in regular exhibition space, while other organizations plan exhibits in their suites.

Definite reservations made for sample rooms include NBC *Thesaurus*: World Broadcasting System Inc.; Standard Radio Inc.; RCA Mfg. Co.; Presto Recording Corp.; Radiads Inc.; Trans-Radio Press Service; and Taylor Tubes.

In addition, other companies which plan exhibits include Western Electric; Techna Corp.; Earnshaw Radio Productions Inc.; Collins Radio Co.; Universal Microphone Co. Ltd., and Associated Music Publishers.

E. L. DUPONT de Nemours & Co., Wilmington, Del., has renewed its *Cavalcade of America* show on CBS, Wednesdays, 8-8:30 p. m., through the fall season, placed by B.B.D.O.

FOOTBALL BROADCASTS AVAILABLE IN DENVER
KFEL - KVOD
SPORTS SERVICE
Ask Gene O'Fallon for Rates and Details
Suite No. 2340A, Stevens Hotel

NAB Faces Convention Showdown

(*Continued from page 20*)

session, with election of officers on Tuesday afternoon. These were reversed, with the election of officers to be one of the final orders of business.

Thus far, there have been no active candidates for the presidency. The incumbent, Mr. Fitzpatrick, has stated he will not seek reelection. Among those now being mentioned as possible choices are Edwin W. Craig, WSM, Nashville, Charles W. Myers, principal owner of KOIN and KALE, Portland, Ore., who is now serving his second term as NAB first vice president; Gardner Cowles Jr., president of the Iowa Broadcasting Co., operating KSO, WMT and KRNT; Mr. Crosley; John Shepard 3d, Yankee Network president, and H. K. Carpenter, WHK, Cleveland, and Arthur B. Church, KMBC, Kansas City.

There has been substantial support for Mr. Craig, who is vice president of the Nashville Life and Accident Insurance Co., which operates WSM, as a man who was entirely acceptable perhaps to the entire membership. He has been a strong member of the board. Mr. Craig, however, has disclosed he will be unable to attend the convention, having planned, in advance of selection of the convention dates, a trip to Europe which cannot be deferred. Although an absentee never has been elected there is such great sentiment in his favor that a precedent may be set by placing his name before the convention. A strong movement for Mr. Myers also has developed, particularly since the disclosure of Mr. Craig's possible absence.

In addition to the four officers the terms of six of the 15 directors expire with the convention That means a new board majority will have to be elected. A proposal, by Ed Craney, of KGIR, Butte, Mont., that board members be elected three from each of the five former radio zones, one of whom shall represent a local station, is due for consideration. Should this amendment to the constitution be adopted, will result in a drastic realignment of board membership.

Expiring Terms

THE OFFICERS whose terms expire are President Fitzpatrick, Vice President Myers, Vice President Edward A. Allen, WLVA, Lynchburg, Va., and Treasurer Levy. Mr. Baldwin's term as managing director expires following the convention and the first business before the new board of directors will be that of his reappointment. A majority of the present board has voted with him on every controversial issue.

Directors whose terms expire are Frank M. Russell, NBC Washington vice president; William S. Hedges, manager, NBC operated stations, New York; I. R. Lounsberry. WGR-WKBW, Buffalo; H. K. Carpenter, Arthur B. Church, KMBC, Kansas City, and Gardner Cowles Jr.

Because of the network sentiment, it is generally felt that only one of the two NBC board members whose terms expire—Russell or Hedges—will be reelected.

A second resolution offered by Mr. Craney, proposing that stations award to accredited non-profit organizations time units of 5% of their aggregate hours, to be prorated among stations in the same area, also will be considered at the convention. The plan, according to Mr. Craney, would put a stop to "time chisels" by unqualified groups, and at the same time provide a workable yardstick whereby time can be donated to bonafide organizations.

The only other change in NAB by-laws proposed is the proposition advanced by Mr. Baldwin for a 50% increase in dues by member stations, to defray the cost of the greatly increased overhead during the last year, occasioned by an unusual number of board meetings and the hectic copyright situation There have been two extra assessments of dues during the last year.

For the last two years the dues of full time stations have the highest quarter-hour rate quarterly. This has yielded approximately $70,000 annually. The 50% increase, if invoked, will bring in the neighborhood of $110,000.

The only scheduled speeches by non-NAB members are those of Judge Sykes and of C. H. Sandage, chief, Division of Transportation and Communications, Bureau of the Census, who will discuss what the radio business census now being conducted means to the industry. Judge Sykes will address the convention of radio regulatory developments during the last several years.

The Radio Research Bureau plan will be raised not only by Mr. Baldwin, but by Mr. Church as chairman of the NAB committee of five named to cooperate with the ANA and the AAAA. At the Tuesday morning session, Mr. Church will open discussion on the plan, which is regarded as the most significant commercial broadcasting project scheduled, since it embraces the proposition of establishing the radio counterpart of the Audit Bureau of Circulation in the publishing fields.

Mr. Carpenter will lead a panel discussion at the Tuesday morning session titled "organizing a station for selling radio advertising." Mr. Sandage's address also occurs at this session.

The significance of the hearings which began before the FCC June 15 on the allocation of ultra-high frequencies for new services will be outlined to the membership Tuesday afternoon by J. H. DeWitt, chairman of the NAB Engineering Committee, and chief engineer of WSM. Mr. Church, at the same session, will deliver the report of the Commercial Committee. Such matters as the cash 2% agency discount, currently being agitated, and local vs. national rates, may enter into this discussion.

The annual NAB banquet will be held at 7 p. m. in the Main Ballroom of the Stevens Hotel. The BROADCASTING Magazine Trophy will be presented to the winner of the Golf Tournament, which takes place Sunday morning, July 5.

STORE IS DOUBLED
Detroit Clothier Expands After Starting Radio Series

A DOWN-TOWN clothier, Conn's Clothes Shop, off the beaten path in Detroit, selling clothing novelties at an average of $5 per suit higher than the two-pants suit and two-for-one competitors as well as a better line ranging from $17.50 to $35 and $40, had never advertised, except rarely in a labor paper, a lodge program, and a sandwich man.

Wanting to build up the trade for 24-inch bottom, belted back merchandise and convince wearers of better clothes that his higher priced clothing was a real value, signed an announcement contract, one spot a day, four years ago. This is now the fourth year of exclusive advertising on WXYZ, Detroit, using programs and spots and the advertiser, a consistent user of time on the air, has doubled his floor space.

Complete Coverage Metropolitan Boston
WCOP

Read These— then Wire for Rates!

★ WCOP is the Boston radio station that will sell your goods at *lowest* cost — in the fourth largest market in America!

★ WCOP is the one station built especially to *fit* the metropolitan Boston market — with the *only* transmitter inside the city limits!

★ WCOP sells goods far *beyond* the metropolitan Boston area — but WE call that *bonus coverage*, and we're *one* station that doesn't *charge* you for it!

★ WCOP's rates are lower. WCOP sells harder. WCOP gets better results for less money!

★ READ the actual case histories at the right. Then send right now for complete coverage data, market information, and WCOP rates!

Unsolicited, a leading Boston advertising agency writes:

"Last year a local 2500-watt station was used 26 times and produced slightly over 2600 inquiries, an average of 100 per week. We have been using 500 watt WCOP with the same program, and other conditions equal. During the first 15 WCOP broadcasts, 1107 inquiries have been received, an average of 73 inquiries per week. Inquiries from the first station cost 59c apiece, a very low figure. On WCOP, inquiries have cost us 34c apiece. We feel that WCOP has proved itself extraordinarily efficient."

★

A confectionery account using one-hour periods once weekly at a time-and-talent cost of $100 per broadcast, produced 39,249 five-cent wrappers in 13 broadcasts, an average of 3,019 per broadcast.

★

Compare these FACTS with your present radio advertising costs! More cases on request!

1120 Kilocycles
267.7 Meters
500 Watts

Transmitter: Brighton District

BROADCASTING STATION
WCOP
In Beautiful Copley Square

... MASSACHUSETTS BROADCASTING CORP.
STUDIOS AND OFFICES...COPLEY PLAZA HOTEL
BOSTON, MASSACHUSETTS

Over $500,000 a DAY!

THE EAST TEXAS OIL WELLS alone produce over a half million dollars a day. There's plenty of money in East Texas. Get a share by selecting KFRO as your spokesman—it wields a mighty voice. Send for "The Story of KFRO".

KFRO
"VOICE OF LONGVIEW"
LONGVIEW, TEXAS

NAB Sales Division To Be Considered

Commercial Men Plan Meeting During Chicago Session

Mr. Lottridge

FORMATION of a sales managers division of the NAB, similar to that in the newspaper field, has been projected by J. Buryl Lottridge, sales manager of Central States Broadcasting System, operating KFAB, Omaha-Lincoln; KOIL, Omaha-Council Bluffs and KFOR, Lincoln.

Having received favorable replies from a number of other station sales managers, Mr. Lottridge has suggested that a call for a meeting of commercial managers be made at the July 6 morning session of the NAB, the meeting to be held that afternoon. This plan was suggested at a discussion Mr. Lottridge held in Kansas City with Arthur Church and J. Leslie Fox, of KMBC.

Letters proposing the sales managers division were sent by Mr. Lottridge to a score of stations, and of ten replies, all were favorable. They included E. H. Bondurant, WHO, Des Moines; Edward W. Hamlin, KSD, St. Louis; Nathan Lord, WAVE, Louisville; Martin Campbell, WFAA, Dallas; C. A. McLaughlin, WHK, Cleveland; C. T. Hagman, WTCN, Minneapolis; Kenneth Marsh, WNAX, Yankton, S. D.; Glenn Snyder, WLS, Chicago. A similar plan had been suggested by Craig Lawrence, of KSO-KRNT, Des Moines. James W. Baldwin, NAB managing director, also has voiced his approval of the plan.

Membership Limited

IT IS PROPOSED to limit the membership to sales managers and exclude representatives and networks. The organization meeting would be closed. Only one person from a station would be eligible.

Mr. Lottridge believes that such a division of the NAB would permit profitable discussion of problems facing sales managers and create a favorable impression on regional and national time buyers as a result of a unification of commercial methods. Additional meeting could be held once or twice a year, he suggests. Organization expense would be negligible, probably involving a small membership fee.

Among subjects which could be discussed, he suggests, are local and national policies, credits, rates and other commercial problems.

FCC Postpones Rule 177

TO GIVE it further opportunity to study the protest of Oswald F. Schuette, president of Short Wave Institute of America, Inc., against revision of the new rule governing international broadcasting, (Rule 177) the FCC Broadcast Division June 20 deferred the effective date of the rule for one month until August 1. Previously, the FCC had extended all other rules pertaining to high-frequency services until Aug. 1.

PHONE THE FOLKS

Wiley Enger to Set Up Ham Set In Convention Hall

FREE radiophone service to the folks back home will be offered delegates at the NAB convention in Chicago by Wiley D. Enger, chief engineer of KFNF, Shenandoah, Ia.

Enger is going to lug some of his choice ham equipment to the convention and set it up in his Stevens Hotel room to operate on the 80, 40 and 20 meter amateur bands. Conventioneers who want to contact their native haunts are advised to tell local amateurs to be on the lookout for Enger's W9CIJ, operating portable, on 3632, 7265 and 14,018 kc cw and on phone 14,165 kc. Enger suggests they pick a time in advance.

The portable outfit will have "a good hefty 50 watts on all bands", Enger promises, and a portable suprerreceiver will be taken along. His only problem, he says, will be to find some 60 cycle current in downtown Chicago. Visiting engineers who bring along their ham tickets will be allowed to tinker with the equipment.

New York Milk Campaign Will Include 15 Stations

J. M. MATHES Inc., New York agency, has again been appointed by Peter G. Ten Eyck, Commissioner of Agriculture and Markets for New York State, to handle the 1936-37 State Milk Publicity Bureau's account beginning July 1, the second consecutive year it has had the account. The total advertising budget this year, as voted by the New York State Legislature, is $250,000. Spot radio and newspapers will be the media.

The spot campaign will begin July 6, on 15 stations in eight cities within the state. One-minute announcements, cut by RCA-Victor, will be broadcast once a day, six days a week on an indefinite schedule. Stations in the campaign are: WHN, WINS, WMCA, WBNX, WOKO, WIBX, WSYR, WFBL, WHEC, WHAM, WGR, WKBW, WBEN, WBNF, WESG.

CHARLES W. BURTON, shortly expected to leave the management of WEEI, Boston, after 12 years with the station, authors a new program over CBS beginning June 28, 6-6:30 p. m., titled *Ma and Pa*, about a Cape Cod couple specializing in summer tourist business.

WIL

THE PIONEER COMMERCIAL STATION IN ST. LOUIS

FIRST in St. Louis to broadcast Boxing, Blow by Blow.

THE rapid advance to broadcasting perfection finds WJJD in the front rank. The move in transmitter location, as indicated, increases our signal strength in Chicago as much as 400%. With WJJD as your advertising medium in Chicago, you receive the type of broadcasting service which you would expect from only the super-power, clear channel stations—and from WJJD at rates so reasonable that they definitely provide the largest audience per dollar spent in the Chicago market.

SPECIAL ANNOUNCEMENT

WEED & CO.

NATIONAL REPRESENTATIVES

Known to time buyers in the East for conscientious service. Call on Weed & Company for information about WJJD effectiveness. 350 Madison Ave., New York City. Telephone No., Vanderbilt 3-3648.

WJJD

20,000 WATTS

CHICAGO'S LARGEST INDEPENDENT RADIO STATION

[illegible] N. WELLS ST. CHICAGO, ILL.

4 times as big!!

VARIETY

WBNX Power Boost

WBNX, New York, has obtained permission from the F.C.C. to up its power from 250 to 1,000 watts, and build a 200-watt shortwave outfit. Boost goes into effect as soon as a new transmitter at Cliffside, N. J., can be completed. Programs thereafter will be long and short-waved simultaneously for greater coverage. Indie station is owned by Standard Cahill and operates on three-quarter schedules. Programs are well salted with foreign stuff, latter being broadcast in 10 languages.

SPEAKS THE LANGUAGE

SHORT WAVE W2XIS 31,600 KC ALL PROGRAMS

STANDARD CAHILL CO. WBNX NEW YORK CITY 1350 KC

PORTABLE UNIT W2XIN 31,100 KC SPECIAL PICK-UP

OF YOUR PROSPECT

WRITE FOR FULL INFORMATION AND RATES

PALS
Tennessee Press Association Meets in WSM Studio

THE NEW order of things between radio and the press was strongly emphasized at the closing session of the Tennessee Press Association's annual convention held in Nashville June 19. The final meeting was held in the auditorium of WSM, Nashville's 50,000 watt station, and with the audience tuned in the Association declared a new policy of cooperation with broadcasters.

Said Dixon Merritt, publisher of the *Lebanon Democrat* and past president of the Association, speaking to some 70 editors and publishers of county newspapers of Tennessee: "There isn't, and never has been, any competition between us and radio. I think we are both doing a mighty fine job. I think we should congratulate each other on that job. And I am glad, that after more than five years, we are at last resolved on a policy of close cooperation with our big brother and friend, the radio."

THE COMPLETE STORY

On the South's finest market is now complete and on file with our representatives:

HIBBARD AYER
NEW YORK

A. T. SEARS & SON
CHICAGO

•

WSOC Charlotte, N. C.

The Other Fellow's Viewpoint . . .

Cash Discounts

TO the Editor of BROADCASTING:

In your June 15 issue, mention was made on the editorial page under the heading of Cash Discounts of the fact that advertising rates for radio time were too low in comparison with the rates of other media—such as magazines, etc.

It has always been my pet idea that some day a comparison (pure and unadulterated) could be made between the results of an advertising dollar spent in radio and an advertising dollar spent in other media (magazines for instance). I will concede you the point that the results can be compared when the cost per inquiry is made on a merchandising campaign, but above that point no other similarities can be found.

Therefore, your statement as mentioned above is of real interest to the writer, for any information you can give me on results obtained from different medias per advertising dollar without a comparison being made between inquiry costs will be appreciated.

Thanking you in advance for this favor, I am

L. J. NELSON,
Asst. Space Buyer,
Wade Advertising Agency,
Chicago, Ill.

June 17, 1936.

[Editor's Note—We refer Mr. Nelson to the leading article in the Aug. 15, 1934, issue of BROADCASTING headed "ANA Survey Shows Radio Best Media Buy"; in addition, there have been numerous other surveys reported from time to time in this publication.]

HARRY HERSHFIELD, noted humorist and cartoonist creator of "Abe Kabibble," has arranged with King Features Syndicate to produce a program featuring his cartoon character, with himself in the leading role.

More Radio-Baseball

TO the Editor of BROADCASTING:

After reading your article "Baseball vs. Radio" in the June 1 issue of BROADCASTING, it strikes me that Mr. James F. Hopkins is entirely right in his assertions. KELD has set a precedent in the South by being the first station to broadcast baseball games in the Cotton States League while the team is at home.

F. E. Bolls, manager of KELD, presented the proposition to the El Dorado Baseball Association, asking permission to broadcast all home games as well as out of town games. Quite an argument ensued. After lengthy discussions pro and con as to the feasibility of broadcasting the home games, the officials finally agreed to permit KELD to broadcast the games for a period of four weeks. The four weeks trial broadcasts were to be closely watched as regards the crowd attendance.

The El Dorado Baseball Association recently held a special meeting with Mr. Bolls to definitely decide the issue. Statistics showed that after comparing the type of ball played this year with last year, weather conditions in '36 and '35, also business conditions between the two years, gate receipts had increased 10% this year over the same period last year and the association attributed the increase entirely to radio broadcasts. They voted unanimously to continue to permit KELD to broadcast all home games of the El Dorado Lions as well as out of town games.

The result of a thorough investigation into the situation proves that if the station has the good will of the public, presents the broadcasts in a becoming manner and the team does its part by playing good baseball, crowd attendance is bound to increase an appreciable percentage. Incidentally, F. E. Bolls, KELD's manager, announces all baseball games over KELD; the weekly wrestling programs have increased the attendance at the grunt and groan exhibitions 100%. The reason, we find why KELD has been successful in these ventures is that the announcer describes the features so realistically that listeners naturally want to see them, proving again that the correct presentation combined with a popular station brings results.

E. A. LECAPTAIN,
News Editor, KELD,
El Dorado, Ark.

Hawaii Not Daylight Time

TO the Editor of BROADCASTING:

We would like to call your attention to a rather serious error which appeared in the May 1 issue of BROADCASTING, page 24. Under the general caption of Daylight Saving Time, the Territory of Hawaii is listed as having this advanced time during the summer months along with certain eastern cities and states. This is not the case.

We do not question your accuracy in printing the information, as you have given your source of the listings as the Merchants' Association of New York.

One definite case in point where a national advertiser was given the wrong impression (not necessarily from BROADCASTING) and cancelled his newspaper schedule which was supposed to call readers' attention to a change in his NBC network program on KGU. He wired the national department of the Advertiser to the effect that "Honolulu being on Daylight Saving Time, it was not necessary to run the announcement."

All network programs released in Honolulu are advanced one hour during the summer, but Daylight Saving Time is not observed in Hawaii.

We would appreciate your cooperation in correcting this error.

HENRY C. PUTNAM,
KGU, Honolulu.

Shifts at WOR-MBS

SEVERAL changes and shifts in the staff of WOR, Newark, were effected in latter June, with William H. Weldson, formerly with John Blair & Co., joining the sales staff and Miriam Adelson, formerly of NBC, succeeding Helen Gunn in the sales promotion department under Joseph Creamer. Miss Gunn was transferred to Mutual from WOR, after Florence Fick, secretary to Fred Weber, MBS coordinator in New York, and Lois Henry had resigned to join Neff-Rogow Inc., New York agency recently established in the RCA Bldg.

the **BIG SPOTS** *in the* **MISSOURI MARKET**

THAT CAN AND WILL SELL YOUR PRODUCT THROUGHOUT THE STATE.

And there's one thing to remember about the THREE productive stations—ONE LOW RATE. Write any station listed below for rates and available time.

KWTO - KGBX • SPRINGFIELD, MO.

KCMO KANSAS CITY, MO.

• **WTMV** E. ST. LOUIS

UNIVERSAL
Velocity and Carbon Microphones

Universal's latest achievement—Ideal for stage use—Not affected by temperature or humidity—Flat frequency response curve from 40 to 10,000 c. p. s. Output-63 D.B.; Low impedance or direct to grid types. Compact, 2¾ x 4¾ in. x 1½ in. thick—Weight, less than 18 oz.—Head swings to any desired angle—Beautifully finished in black enamel and artistic chrome plate—Ask for new catalog sheet describing Models RL, RP, RH and CB—List $22.50.

Universal Microphone Co., Ltd.
424 Warren Lane, Inglewood, Calif., U.S.A.

PAUL F. GODLEY

and Associates

CONSULTING RADIO ENGINEERS

◆

OVER-ALL ENGINEERING STUDIES
COMPLETE COVERAGE SURVEYS
RECORDINGS OF FADING & INTERFERENCE

◆

TRANSMITTER LOCATION SURVEYS
DIRECTIVE ANTENNA INSTALLATIONS
PLANT DESIGN; PLANT CORRECTION

◆

"ULTRA-HIGH" INSTALLATIONS

"25 Years of Professional Background"

◆

10 Marion Road — Montclair, N. J.

'Phone Montclair 2-7859

How Census Data Was Computed

FOLLOWING is the text of the Joint Committee's statement covering the method of calculating the county - by - county radio census of the United States published on pages 23-34 in this issue.

The Joint Committee on Radio Research recently estimated the number of families owning radio sets in the United States on Jan. 1, 1936, as 22,869,000. Using this total as a basis the Committee now submits estimates of the number of sets in use in each of the 3,073 counties in the United States.

The Committee wishes to emphasize the fact that these figures are estimates, which means that there is a certain unmeasurable degree of error in the figures for individual counties. For any group of counties, however, such as those contained within the listening area of any typical broadcasting station, it is believed that the sum of the estimates for individual counties is sufficiently accurate for practical purposes.

The principle of correlation has been used in making these estimates. By means of this process certain factors were found which measure or correlate with the number of radio homes by states as determined by the U. S. Census of 1930 and as estimated by the Joint Committee on Radio Research for 1936. The factors discovered in this case are total retail sales for 1933, passenger automobile registrations, 1935 and telephone homes, 1935.

These three factors were combined by multiple correlation and the resulting formula was then applied to counties, a procedure which has yielded reliable results in many similar projects. The county estimates have been tested against 1930 census figures and against independent estimates made by CBS and by a large radio advertiser and the results indicate a remarkably high degree of correspondence, especially when they are combined by groups of counties. The county figures total 22,869,000 radio families, the estimate for the country as a whole recently issued.

The statistical formula was developed under the direction of L. D. H. Weld, chairman of the Technical Committee and the clerical work of applying the formula to individual counties was performed by the research departments of the Columbia Broadcasting System and the National Broadcasting Company.

Bradley Goes on News

TRUMAN BRADLEY, for the last five years ace announcer of the staff of WBBM, Chicago, who handled the *Ford Sunday Evening Hour*, on June 29 joined the ranks of news commentators, resigning his regular announcing post. He is now doing the *News Review for the American Family* over WBBM daily except Sundays, 11:30-11:45 a. m., sponsored by Procter & Gamble. Formerly with KFI, Los Angeles.

Freedom of Radio

FREEDOM of radio and the press were assured in the platforms of both the Republican and Democratic parties at their conventions last month. This came in the wake of expressed assurances by both President Roosevelt and Governor Landon that they have no desire or intention of placing any undue restrictions on broadcasting as a free, competitive enterprise.

GOLF TROPHY — This beautiful silver loving cup, the fourth to be awarded by BROADCASTING Magazine, will go to the winner of the NAB Golf Tournament just preceding the convention. Previous winners (low net score, declared handicaps) were Dr. Leon Levy, WCAU; Lewis Allen Weiss, WJR; Art Kemp, KNX.

Amoco Extends

AMERICAN OIL Co., Baltimore (Amoco) announced as BROADCASTING went to press that the spot campaign on a large group of Eastern and Southern stations had been extended another 18 weeks into November, using the same station list. [See earlier story on another page.] Joseph Katz Adv. Co., Baltimore, is the agency.

FOR NEWS AND SPORTS
DENVER LISTENS TO
KFEL - KVOD
Gene O'Fallon—Sales Mgr.
Suite No. 2340A, Stevens Hotel
During N. A. B. Convention

G.O.P. to Show NAB

TO SHOW radio station managers and commercial men how they can sell time to local and state committees, and how to "merchandise" political broadcasts, the radio division of the Republican National Convention will have large displays at the NAB convention in the Stevens Hotel. Tom Sabin, G.O.P. radio director, and John Elwood, former NBC vice president who is the Eastern program director for the G.O.P., will be in charge.

Amos Donates Bonus

THE bonus bonds which Uncle Sam has sent Freeman F. Gosden, (Amos of *Amos 'n' Andy*) as adjusted compensation for his services as naval wireless operator during the world war will go into a fund to provide for the education of four Negro youths. Gosden, now broadcasting for Pepsodent over the NBC-Red network from Hollywood with Charles Correll (Andy), has designated the editor of the *Chicago Defender*, Negro newspaper, to select the four youths who will benefit by the fund. They will be selected from among students at Tuscaloosa and Hampton Institutes.

Wildroot Contest

WILDROOT Co. Inc., Buffalo (instant shampoo) on June 15 announced a prize contest for the best 25-word letter on "I like instant shampoo because . . ." All entries must be accompanied by a carton from a bottle of Wildroot instant shampoo. The contest will run for four weeks, closing midnight July 13. A Ford Sedan is the first prize; second prize $100; third $50; next 20 best letters $5; next 80 $2. All contestants will receive a magic crystal fortune telling book. The program is heard on 31 CBS stations, Mondays, 7:30-7:45 p. m.

Sanka's New Show

GENERAL FOODS Corp., New York, for Sanka Coffee, has signed Helen Hayes for a new drama series on the NBC - Blue network starting in September. It has reserved the Monday, 8 - 8:30 p. m. period. Young & Rubicam is agency.

WJBK, Detroit, will broadcast programs designed and produced by the Board of Education, with the station acting in an advisory capacity.

"PAUSE for Station Announcement"

We do not claim because he listens to WBIG's SPORTS REVIEW that TONY MANERO won the National Open Golf Championship title, from the world's greatest golf shooters, and at the same time broke a record that has stood for forty years . . .

TONY MANERO is a famous Greensboro institution . . . so is WBIG . . .

And you reach the richest and most populous section of the South when

Your Station is WBIG in Greensboro, N.C.

Dominating Maryland's 2nd Largest Market

WTBO

800 KILOCYCLES

CUMBERLAND

PRIMARY AREA (U. S. Census) 16 counties in Md., Pa., Va., W. Va.	378,081	POPULATION	639,964	PRIMARY AND SECONDARY AREAS 26 counties in Md., Pa., Va., W. Va.
	41,889	RADIO FAMILIES	76,156	
	$97,747,000	ANNUAL RETAIL SALES	$177,939,000	

NEAREST NETWORK STATION 130 MILES — NEAREST LOCAL STATION 60 MILES

ASSURED CONSISTENT COVERAGE FOR NATIONAL SPOT ADVERTISERS

Tenth Anniversary

Greetings

to those who have shared with us
in the advancement of broadcasting

NATIONAL BROADCASTING COMPANY, INC.

A Radio Corporation of America Service

NEW YORK • WASHINGTON • CHICAGO • SAN FRANCISCO

Most of America's Greatest Advertising Agencies Subscribe to

RADIO COVERAGE REPORTS

RADIO Coverage Reports are essential to the adequate servicing of radio accounts. They describe the available day and night service in every important city in the United States, the relative ranking of the principal services, the signal strengths necessary for clear reproduction in business, residential and outlying areas, the stations subject to fading and interference at night and those rendering intermittently useful service.

•

Since this service started last December, every agency subscribing on the basis of an initial trial quarter maintained its subscription at the end of the trial. We consider this as evidence of a needed service rendered in an acceptable manner.

Radio Coverage Reports Are Issued by

EDGAR H. FELIX

32 ROCKLAND PLACE NEW ROCHELLE, N. Y.

FAIRCHILD PROCTOR

SOUND RECORDING EQUIPMENT

PIEZO PICK-UP

Non-Resonant
Non-Magnetic
Freely Damped
Minimum Record Wear
Unequaled Mechanical Design
Calibrated Needle Pressure Scale
Extended High and Low Frequency Range
Vertical and Horizontal Movement on Ball Bearings

FIRST PUBLIC SHOWING

During your visit to the National Association of Broadcasters' Convention, see the Fairchild-Proctor first showing of their complete line of SOUND RECORDING EQUIPMENT at the Hotel Stevens, Chicago.

FAIRCHILD AERIAL CAMERA CORP.
62-10 WOODSIDE AVENUE, WOODSIDE, N. Y.

SHOW MUST GO ON
Production Manager Near Death But Sticks to His Job

CLINGING to a niche in the side wall of the Copley Plaza Hotel, Boston, his foot caught between an iron girder and the marquee, Arthur L. Leary, production manager of WCOP, Boston, remained in that precarious position 25 feet above the street while he directed engineering activities for the broadcast of a June parade.

Not one of the thousands of persons who lined the street outside the hotel knew that Leary was in danger for more than 15 minutes. None of the members of the engineering staff working from the control room of the station were aware of his danger.

The only one who knew was the announcer, Jim Donovan, WCOP news editor, doing the parade broadcast. Unable to leave his post, he was forced to watch the production manager cling to the wall, his fingernails gripping the narrow edgings of the building, until the parade had passed. After returning his audience to the main studios of WCOP, Donovan called for help. With the aid of a ladder, Leary was helped to the street.

Minor Party Hookups

BEING a duly registered party, the Communist party's 1936 presidential nominating convention in New York June 28 secured hookups for broadcasts of its nominees' acceptance speeches from both NBC and CBS. NBC-Blue carried one hour from 5-6 p. m. from Madison Square Garden and CBS carried the program from the convention floor from 5:30-6 p. m. It is also expected that the networks will be called upon to carry the proposed convention of the new Union Party, which will name Lemke and O'Brien; CBS has already given Father Coughlin a hookup for the initial announcement.

Rumanian Conference

THE U. S. Government is arranging to be represented at the International Radio Consulting Committee (C. C. I. R.) conference in Bucharest, Rumania, in May, 1937, where radio technical experts of the world will gather to prepare for the treaty-making conference at Cairo in February, 1938.

WIL

THE PIONEER COMMERCIAL STATION IN ST. LOUIS

FIRST in St. Louis to broadcast by Mobile Transmitter direct from scene of action.

Van Volkenburg Named As Atlass Aide; Shouse Is Chosen to Head KMOX

Mr. Van Volkenburg

THE naming of Jack L. Van Volkenburg as executive assistant to H. Leslie Atlass, CBS Western division vice president at Chicago, and of James D. Shouse as Mr. Van Volkenburg's successor as manager of KMOX, St. Louis, was announced late in June by Chicago offices of CBS.

Mr. Van Volkenburg, who has managed KMOX since 1932, was appointed to succeed Donald W. Thornburgh, who early in June was elected a vice president of CBS and designated to take charge of the network's expanding Pacific Coast activities. Mr. Shouse comes to CBS from Stack-Goble Adv. Agency, Chicago, although for six years prior to joining that agency he was a sales contact man for CBS in Chicago.

In its realignments of positions brought about by expansion in the West, where it has KNX under purchase option and KSFO under lease option, and by its acquisition of WEEI, Boston, CBS has yet to fill the WEEI managership. The station's lease to CBS was approved by the FCC last month. Authority to take over KNX still pends FCC approval, after which a manager will be named.

SOUND-ON-FILM for radio stations will be demonstrated at the Stevens during the NAB convention by Associated Cinema Studios, Hollywood, in conjunction with the Technа Corp., San Francisco. Frank W. Purkett, vice president and general manager of Associated, will be in charge.

In Washington

The activities of politics, business and society are more colorful than ever before. You will enjoy Washington

The best in accommodations, location and smart surroundings are available at this distinctive hotel. Write or wire for reservations.

The HAY-ADAMS HOUSE
LAFAYETTE PARK AT SIXTEENTH
NATHAN SINROD, MGR.
WASHINGTON, D.C.

BLAW-KNOX
Vertical Radiators

Blaw-Knox Vertical Radiators in Little America-base of the Byrd Expeditions to the South Pole

STANDARD FROM POLE TO POLE

From Little America on the south to Alaska in the north, Blaw-Knox antennas are found serving all types of modern radio stations. As a pioneer in the industry Blaw-Knox has furnished:

The tallest Vertical Radiator in the world (1045 ft. Budapest, Hungary).

The tallest Vertical Radiator in the United States.

The first self-supporting Vertical Radiator.

The first "half wave" Vertical Radiator for broadcasting.

The first Vertical Radiator erected atop a building.

The first Vertical Radiator to be used for simultaneous broadcasting by 2 stations on different frequencies.

The use of Blaw-Knox Vertical Radiators results in greatly improved coverage. If you plan antenna improvements it will pay you to consult Blaw-Knox.

BLAW-KNOX COMPANY

2038 Farmers Bank Building · Pittsburgh, Pa.

ON THE JOB!

WOW is "tops" in showmanship and merchandising ability. Every minute of every day the Program and the Production Departments of WOW pull together to obtain merchandising results. Recently WOW initiated the first series of "Electric Kitchen of the Air" programs, in this territory. "Your voice of the air" should be WOW in Omaha and its trade territory.

JOHN BLAIR CO., Representatives New York, Chicago, Detroit, San Francisco

WOW
OMAHA
590 Kilo 5000 Watts
"Covers the Nation's Breadbasket."

ON THE N.B.C. RED NETWORK

WXYZ
DETROIT
NBC
BLUE NETWORK

SEND FOR
22 SHORT STORIES
OF SALES SUCCESSES

Described in these terse reports of sales successes, achieved through the use of WXYZ and the Michigan Radio Network, there may be a case that fits your problem. And even though your product be a mouse trap, (on which we have no report) it will still pay you to contact WXYZ.

Let Us Write YOUR Success Story—

WXYZ, Detroit's NBC blue network station, has a chain of 8 stations in Michigan's 8 largest cities. Probing the very heart of Michigan's great market centers—combining program appeal and public acceptance with a great merchandising service—WXYZ offers *real sales producing power.* This great *plus* service—the merchandising service—secures dealers, distribution for new products or revives and increases distribution for established products. Let us write YOUR success story

KING-TRENDLE BROADCASTING CORPORATION
300 MADISON THEATER BUILDING... DETROIT
WM. G. RAMBEAU CO., Representatives, Home Office: Tribune Tower, Chicago
Eastern Office: 507 Chanin Bldg., New York Western Office: Russ Building, San Francisco

The Man-Power That Keeps WJAY Moving

THE DRIVING force behind WJAY, Cleveland, is Edythe Fern Melrose, titian - tressed general manager, who has surrounded her capable staff with handsome modern studios on the second floor of Carnegie Hall, Cleveland. The 10,000 square feet of studio and office space provide a luxurious setting. The control room is built on a false floor overlooking the three studios. Announcers have their own private soundproof offices. Left to right are Stanley Altschuler, director of foreign programs; Maxwell Hage, production manager; Beverly Dean, news editor, producer; James Sands, producer, writer; Edythe Fern Melrose, general manager; Jene Lavalle, production, writer; Mendel Jones, chief announcer; Wayne Johnson, program director; Bill Cavanagh, publicity director.

STUDIO NOTES

YANKEE NETWORK covered payment of veterans' bonus bonds in Boston under wartime conditions. In dense fog and rain, Yankee's short-wave truck, W1OXCT, with George Steffy, production supervisor, and Spuddy Stone, chief operator, arrived at a veteran's home for delivery of the first bond. Linus Travers, Yankee executive, interviewed the recipient. Others also were interviewed, with Boston sponsors buying up the time after each broadcast.

A NEW half-hour radio program sponsored by General Electric Co., Schenectady, popularizes scientific research and makes it easily understandable to the layman. Originating in the research laboratory in Schenectady Saturday night, the program is broadcast by WGY and short-waved to foreign countries by W2XAF. It consists of a popular talk by one of the scientists of the laboratory staff, and a "Science Exchange" through which questions of a scientific nature sent in by radio listeners are answered.

KFWB, Hollywood, plans to move executive offices from the Warner Bros. Hollywood Theatre Bldg. in July to the sound stage on Warner's Sunset Blvd. lot. More than a year ago the station's production staff and studios were moved to the lot, with the administrative staff and offices remaining in the theatre building. Ultimately it is planned to build a radio building for KFWB.

KIZ, Denver, broadcast the formal opening of a six-mile water diversion tunnel to carry Denver's water supply through the Rockies. The remote was 53 miles from Denver on the backbone of the Continental Divide.

IN A RECENT table tennis contest, the team of WIP, Philadelphia, defeated WFIL four matches to two. WIP now claims the Philadelphia radio championship. Members of the winning team were Murray Arnold, public relations, Edward Wallace and Alun Williams, announcers and Morris Spector, drummer. On the WFIL team were French Becker, chief engineer, Mrs. Becker, Arnold Nygren, technician, Jow Connolly, public relations, and Al Stevens, announcer. A return match was scheduled for July 1.

WWVA, Wheeling, has been presented with a "Certificate of Appreciation" by the local Red Cross chapter in recognition of its service during the March flood in the Ohio Valley.

KFRO, Longview, Tex., is redecorating studio walls in modernistic style and is repainting the entire plant.

EXACTLY ten years to the day, June 14, 1926, when he introduced her *Classic Hour* over the old KLDS, Independence, Mo., forerunner of the present KMBC, Arthur Church, manager of KMBC, again introduced Mrs. August Walter Cooke, prominent Kansas City pianist. The entire staff gathered around to pay tribute to Mrs. Cooke, who now enters her eleventh consecutive year on the station.

A NEW feature on KMTR, Hollywood, is *The Listener Speaks.* It is designed to parallel the daily newspaper's "Voice of the People" idea and listeners can speak for two minutes on any topic they select.

THE *Los Angeles Times*, in addition to its KHJ affiliation, has also run a remote line to KMPC, Beverly Hills, for a daily early morning quarter-hour, *The Job Man.* It is announced by members of the classified advertising department.

A FEATURE of the recent celebration by WWVA, Wheeling, of its fifth year as a CBS station was the "trial" of the station before the court of public opinion. The station was asked to give evidence of its right to observe the anniversary, the proceedings being staged in a court room setting, and conducted by staff members.

WAAB, Boston, has started an exclusive ladies' feature, titled *The Morning Carnival*, broadcast daily for two solid hours, six days a week. Nine features are presented, including news flashes culled from Yankee Network News Service; "Behind the Microphone", verbal snapshots of favorite radio stars; movie gossip of the Hollywood firmament by Louella O. Parsons, Universal Service motion picture editor; Style Shorts by Dorothy Roe; beauty advice by Dorothy Melvin, Yankee Network's staff beauty expert; home making advice; The Social World—information about Socialites; dance music.

WWNC
ASHEVILLE, N. C.
Full Time NBC Affiliate *1,000 Watts*

NOW, summer folk and tourists are flocking to cool Asheville and Western North Carolina. Until fall, this section will enjoy . . .

Doubled Population
---Doubled Business

Get your share of sales in this rich market over WWNC—sole blanket radio coverage!

AN INNOVATION was inaugurated in WDRC, Hartford, recently, when broadcast via ultra-shortwave was presented over the air direct from Connecticut State College at Storrs. Having given up their regular broadcast channel, WCAC, the college was desirous of broadcasting the ceremonies incident to the inception into office of the college's new president, Dr. Albert Jorgenson. Prof. Daniel E. Nobel of the college staff, broadcast the ceremonies including addresses by Gov. Cross of Connecticut, and Dr. Jorgenson, via ultra-shortwave using the frequency of 100 mc. or 3 meters thru the college experimental station WIXEV. A special antenna system was installed atop the Hartford-Connecticut Trust Company, site of WDRC's new studios and special equipment picked up the short wave broadcast and put it on the air over WDRC. The original program was so successful that highlights in the commencement exercises were broadcast in the same way.

A FIFTEEN-MINUTE straight shopping talk giving day's prices at 8:45 five mornings a week, *Seems Unbelievable*, has been started on WGAR, Cleveland, by the Mareican Meat Co., Cleveland. The firm operates a giant market, doing more than a million dollars in food business a year, with 150 employes. Ethel Hawes and Ben Levin of the *Ethel & Ben* hour presented later in the day, handle the program, which is unique in that it offers no entertainment. The sponsor has in mind giving women of Cleveland the news that reaches 30% of their income—food news. Response has been far greater than expected. Clerks report that shoppers respond in some cases a half-hour after the broadcast. Store posters—600 in number—and newspaper advertising are used to support the program.

AUDIENCE HOLDING
WIBW Runs Three-Instalment Serial in One Evening

ED FELLERS, vice president and radio executive of Presba, Fellers & Presba, Chicago agency, describes a sure-fire method adopted by Don Searle, manager of station WIBW, Topeka, of getting and holding a large audience throughout the entire evening.

One night a week, WIBW broadcasts a transcribed mystery or adventure drama, complete in three episodes. These dramas are as full of thrills and action as the old-time dime novel and are spotted at 30 to 45-minute intervals throughout the evening. At the close of each episode, the time of the next installment is announced and it is suggested that the audience leave their dials set on the station.

"The success of this plan has not only been shown by increased sales and response for our advertisers," says Mr. Searle, "but we are continually receiving reports that children refuse to be sent to bed until they have heard the concluding installment of the series."

A NEW juvenile series on WHAM, Rochester, *Children Can Conquer*, is designed to acquaint children of St. Mary's Boy's Home and St. Patrick's Girl's Home with elementary facts of radio performance. The half-hour Saturday morning programs represent the practical application of broadcast lessons studied during the prior week under the guidance of Levere Fuller.

WIBX
CBS
LISTEN

NORMAN CRAIG
230 E. 50th St.
New York City

REITER & JAEGER
333 No. Michigan Ave.
Chicago, Illinois

UTICA
NEW YORK

Dale Robertson
General Manager

There's more to getting results for an advertiser than just the broadcasting of his program. This Columbia outlet in the heart of New York State's rich Mohawk Valley believes in merchandising with a capital "M". WIBX has a complete merchandising department that REALLY functions — a department that makes every effort to help sell the products which are advertised. Judging by the constant renewals of old contracts, and the consistent addition of new accounts, WIBX must be getting the kind of results our clients are after.

Incidentally, mats of the cut at the left will be furnished free to all advertisers for newspaper tie-ins.

WELCOME TO CHICAGO NAB! . . . . .

- BROADCAST ENGINEERING
- EQUIPMENT
- MEASUREMENTS
- CONSTRUCTION
- INSTALLATION

Our entire staff of practical radio engineers will be available during the NAB convention, July 5-8.

We will appreciate an opportunity to consult with you regarding the engineering problems of your station.

It may be that you are interested in a field intensity survey . . . or perhaps like accurate measurements on your transmitter equipment . . . FCC rule No. 132 may necessitate the rebuilding or replacement of your present equipment.

We have the answers . . . offering conscientious service based on many years of practical radio station engineering.

★

OUR CONVENTION HEADQUARTERS . . . . ROOM 2440-A STEVENS HOTEL

W. P. HILLIARD COMPANY

2106 CALUMET AVE. . . . CHICAGO, ILLINOIS

Marrow Oil Returning

J. W. MARROW Mfg. Co., Chicago (oil shampoo) will inaugurate a fall radio program beginning Sunday, Sept. 6, 3-3:30 p. m., on 20 NBC-Red network stations. The program, talent for which has not been announced, is signed for 52 weeks and will be heard over a special hookup of WEAF, WTAM, WCAE, WWJ, WMAQ, KSD, WOW, WDAF, CRCT, CFCF, WFAA-WBAP, KPRC, WOAI, and the Red Mountain and Pacific Coast groups. Sellers Service Inc., Chicago, placed the account.

JACK BENNY, Eddie Cantor, Nelson Eddy, Lanny Ross, and Lulu Belle of the *WLS National Barn Dance*, in the order named, have been voted the most popular artists on the air in the third popularity poll conducted by *Radio Guide*, fan magazine.

CRYSTALS

★ Low Temperature Coefficient for the Broadcast Band
★ Mounted in Isolantite adjustable Air Gap holder
★ Approved by the Federal Communications Commission

Freq. drift less than 4 Cps/°C./Meg. ---- **$35.00**

Freq. drift less than 2 Cps/°C./Meg. ---- **$40.00**

Actual Frequency Drift Curve furnished upon request.

AMERICAN PIEZO SUPPLY COMPANY
Sunny Slope Sta. P.O. Box 6026
KANSAS CITY, MO.

MAN-MADE STATIC
Noises Aid in Locating Source Of Local Interference

MAN-MADE static is an unwelcome guest on most programs. Probably the only exceptions are the special broadcasts by Tobe Deutschmann Corp., Canton, Mass. (radio filtering devices) over W1XAL, Boston shortwave broadcasting station, in which practically the entire scale of artificial static is generated in the studio to be the star performer on the program. The purpose of these broadcasts, which are made available to broadcasting stations through personal appearances and as electrical transcriptions, is to enable the listener to identify the various sounds and to take proper measures to eliminate them, either directly or by an intelligent protest to the power company or authorities.

The various sounds artificially created include those produced by diathermy machines, electric signs, neon lights, electric shavers, violet ray machines, dental drills, automotive ignition, street cars, traffic lights, vacuum cleaners, refrigerators and elevator motors. Two studios are required in making the transcriptions and for personal broadcasts. The speaker talks in one studio, in which, in addition to the microphone, is a loudspeaker connected to an ordinary broadcast receiver located in the second studio, and tuned to a local oscillator. The oscillator may be modulated either with phonograph pickup or voice, and is in effect a miniature broadcasting station. The noise devices are operated in the second studio, and create noise exactly as it is heard in the home.

NOISE MAKER—Here is the apparatus used to recreate the interference that is heard through the average person's loudspeaker.

A & P Signs Kate Smith For Hour Series on CBS

GREAT ATLANTIC & PACIFIC TEA Co., New York (coffees) will discontinue the three-a-week CBS series after September and take a full CBS hour on Thursdays, 8-9 p. m., beginning Oct. 1 and using the 39 stations now broadcasting the Kate Smith program. The new program will be a variety program featuring guest stars, Kate Smith and Jack Miller's orchestra.

The period is opposite the Standard Brands *Rudy Vallee* hour on an NBC-Red network.

It is understood that Kate Smith's new contract with A & P calls for a weekly stipend of $7,000. She will continue, in addition to her radio duties, to travel around the country attending A & P sales meeting. Ted Collins, her personal manager, will continue to announce.

A & P sells more coffee than any other firm, its Eight O'Clock coffee being the biggest seller of all brands. Other A & P brands are called Bokar and Five O'Clock. Paris & Peart Inc., New York, handles the account.

Big New Account

BENEFICIAL MANAGEMENT Corp., Newark (personal loans) is a new radio account which will use 44 CBS stations west to Lincoln, Neb., for an unannounced program to make its debut, once weekly, beginning Oct. 4, Sundays 5-5:30 p. m. It is signed for 52 weeks. Albert Frank-Guenther Law Inc., New York, is the agency with Neff-Rogow Inc., New York, serving as radio counsel to the agency.

LONG TIME LIMIT AIDS NBC BOOKIN

WHEN NBC announced recen[t] that the time limit on future co[n]tracts had been extended from [t]o to 90 days, several fall contra[cts] were quickly booked. They i[n]clude:

Packard Motor Car Co., Detro[it] (motor cars) will take the enti[re] NBC-Red network for the Fr[ed] Astaire program, Tuesdays, 10-[10:30] p. m., beginning Sept. 8. John[ny] Green and orchestra will be hea[rd] with Astaire, the program to [be] keyed from NBC Hollywood. Pac[k]ard was on CBS last year wi[th] Lawrence Tibbett. The progra[m] is signed for 52 weeks throu[gh] Young & Rubicam Inc., New Yor[k].

General Mills (Wheaties) w[ill] resume *Jack Armstrong*, child pro[-] gram, on CBS for several years. It is slated for the NBC-Red ne[t]work, Mondays through Friday[s] 5:30-5:45 p. m., beginning Aug. 31. Blackett-Sample-Hummert Inc. Chicago, placed the account, which is signed for 34 weeks.

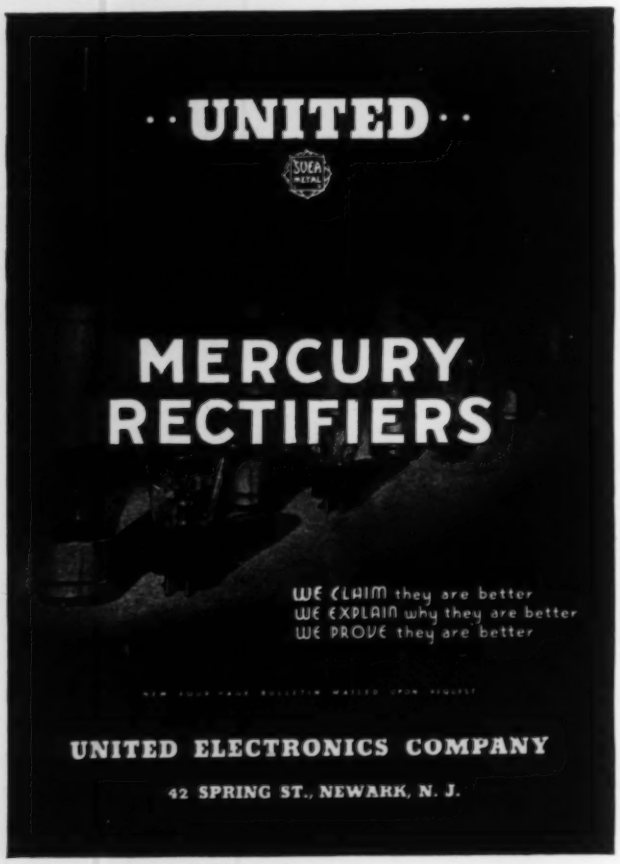
Real Silk Hosiery Mills Inc. Indianapolis again will be hear[d] this fall on its former NBC-Blue period, Sundays, 9-9:30 p. m. starting Sept. 13, with talent [to] announced. Program is signed for 52 weeks. Leo Burnett Co. Inc., Chicago, is the agency.

General Motors to Resume

GENERAL MOTORS Corp., De[-] troit (institutional) through Camp[-] bell-Ewald Co. of New York, in[-] tends to resume the *General Motors Symphony Concerts* on the same Sunday night period, 10-11 p. m. beginning Sept. 13, over a coast-to-coast NBC-Red network.

Wm. R. Warner Co., New York (Sloan's liniment) through Cecil Warwick & Cecil Inc., New York has requested the NBC-Blue net[-] work period Mondays, 9-9:30 p. m., beginning in October, but as this is beyond the 90-day time limit no contract has been signed.

General Foods Corp., New York (Log Cabin syrup) is looking for a suitable hour on the NBC-Blue network for a half-hour weekly program to feature Louise Massey of the Westerners (now heard on *Showboat*) and John Milton in a program built around a western Dude ranch. The program is scheduled to get under way late in September or early in October with Benton & Bowles Inc., New York, handling the account.



RCA — WORLD WIDE WIRELESS

FREQUENCY MEASURING SERVICE

Many stations find this exact measuring service of great value for routine observation of transmitter performance and for accurately calibrating their own monitors.

MEASUREMENTS WHEN YOU NEED THEM MOST

R. C. A. COMMUNICATIONS, Inc.
Commercial Department
A RADIO CORPORATION OF AMERICA SERVICE
66 BROAD STREET NEW YORK, N. Y.

"A VALUABLE INVESTMENT FOR ANY STATION.. REGARDLESS OF ITS POWER"

From an unsolicited letter by Jay P. Beard of Radio Station KBTM, Jonesboro, Arkansas

"We are thoroughly pleased with the operation of our new Truscon Vertical Radiator. We conducted a test program on our regular broadcast schedule and switched from our old aerial system to our new tower... at the same time making an announcement of the switch-over and asking our listeners to let us know of any difference in reception they noticed on their receivers.

"Listeners reported they noticed interference from other stations *before* the new tower was put into operation but that our station is now perfectly clear and *our signal drowns out the other stations completely.*

"Naturally, we are very much gratified with these results. We feel that a Truscon Vertical Radiator is *a valuable investment for any station regardless of its power.*"

Truscon Self-Supporting Vertical Radiators utilize assigned power with maximum efficiency. Night fading is eliminated. Truscon offers expert co-operation to station executives, operators, radio consultants and engineers in determining the most efficient and economical design of a Truscon Vertical Radiator to meet YOUR station's requirements.

TRUSCON STEEL COMPANY • YOUNGSTOWN, OHIO

If you are unfamiliar with the location of the Truscon sales offices in your locality, write to Truscon Steel Company, Youngstown, Ohio.

TRUSCON VERTICAL RADIATORS

ACTIONS OF THE
FEDERAL COMMUNICATIONS COMMISSION

(Broadcast Division)

JUNE 15 TO JUNE 29, INCLUSIVE

Decisions . . .

JUNE 20

APPLICATIONS GRANTED:

WMIN, St. Paul — Modif. CP change equip., trans. site.

WJDX, Jackson, Miss. — Auth. antenna measurement.

WSPR, Springfield, Mass. — License for CP 1140 kc 500 w ltd.

WHIS, Bluefield, W. Va.—Modif. license 250 w 500 w D to 500 w N 1 kw D.

KCMO, Kansas City—Modif. license move studio locally, change spec. to unltd.

WDNC, Durham, N. C.—Consent transfer control to Durham Herald Co.

WDBJ, Roanoke, Va.—Consent transfer control Times-World Corp. from J. B. Fishburn to members of his family.

WMEX, Boston; KSLM, Salem, Ore.; KDB, Santa Barbara, Cal.; WJEJ, Hagerstown—Renewal licenses.

KGFF, Shawnee, Okla. — Modif. CP change equip., trans. site, antenna.

WAYX, Waycross, Ga. — Modif. CP trans., studio sites, equip.

WEEI, Boston — Consent vol. assign. license to WEEI Broadcasting Corp.

KOB, Albuquerque, N. M.—Consent vol. assign. license to Albuquerque Brdcstg. Co.

KFRU, Columbia, Mo.—Consent transfer control to Star Times Pub. Co.

SET FOR HEARING — WJAS, Pittsburgh; NEW, Old Colony Brdcstg. Corp., Brocton, Mass.; NEW, Voice of Corsicana Assn., Corsicana, Tex.; NEW, Chauncey W. Hammond, Oakland, Cal.; NEW, Harry G. Kipke, Ann Arbor, Mich.; NEW, R. E. Chinn, Moorhead, Minn.; NEW, Dallas Brdcstg. Co., Dallas; NEW, New England Radio Corp., Bridgeport, Conn.; WHAT, Philadelphia.

SPECIAL AUTHORIZATIONS—WCRD, Waukegan, Ill., extension temp. auth. Zion studio; WBNY, Buffalo, granted temp. auth. unltd. if WSVS is silent; WSVS, Buffalo, granted temp. auth. remain silent specified days; KGHL, Billings, Mont., extension temp. auth. 780 kc 1 kw 2½ kw LS unltd.; WEST, Easton, Pa., extension temp. auth. Simul.-WKBO.

APPLICATION DISMISSED — NEW, George F. Bissell, Pittsfield, Mass. CP 1200 kc 100 w D.

APPLICATION DENIED — NEW, John Perkins Rabb, Lenoir, N. C., CP 1370 kc 100 w D as in default.

ACTION ON EXAMINERS' REPORTS:

NEW, George B. Bairey, Valley City, N. C.—Granted CP 1500 kc 100 w unltd., sustaining Examiner Dalberg.

KVI, Tacoma—Granted CP move trans., new equip., increase 1 kw to 1 kw N 5 kw D reversing Examiner Walker.

WSMB, New Orleans—Granted renewal license, sustaining Examiner Hill.

MISCELLANEOUS — WMT, Cedar Rapids, Ia. — Reconsidered and granted applic. CP change equip., increase 2½ to 5 kw D; National Television Corp., New York, Denied petition asking temporary use 2,000-2,100 kc for television demonstration; KOB, Albuquerque, N. M. granted applic. renewal license, assign license to Albuquerque Brdcstg. Co.; KOL, Seattle, reconsidered and granted 5 kw D; NEW, Hammond-Calumet Brdcstg. Corp. Hammond, Ind., granted rehearing applic. CP 1480 kc 5 kw D, denied petition amend applic.; KROW, Oakland, Cal., denied petition intervene hearing Earl Yates applic. CP Los Cruces, N. M.; KIT, Yakima, denied continuance hearing applic. KUJ; NEW, Great Western Brdcstg. Assn. Inc., Logan, Utah, accepted answer to appearance and statement of facts filed by Cache Valley Brdcstg. Co.; KRSC, Seattle, granted applic. increase 100 to 250 w unltd.; WBCM, Bay City, Mich., granted request file brief opposition Saginaw Brdcstg. Co.; WHDL, Olean, N. Y.; reconsidered and granted without hearing applic. transfer control to Olean Times Herald; NEW, Harold Johnson & Leland M. Perry, Cedar City, Utah, denied applic. new station without hearing, and denied continuance.

RATIFICATIONS:

KFJZ, Fort Worth — Granted extension program tests (6-9).

WWSW, Pittsburgh—Same (6-10).

KTSM, El Paso, Tex. — Granted temp. auth. carry programs WDAH (6-13).

WELI, New Haven — Extension temp. auth. operate without antenna ammeter (6-15).

Merced Star Pub. Co.—Granted petition cancel order oral argument applic. CP and directed it be submitted to Broadcast Division. Western Broadcast Co. permitted to withdraw exceptions to Ex. Rep. I-200 and request oral argument (6-10).

Applications . . .

JUNE 15

WTIC, Hartford—Extension exp. auth. change 1060 to 1040 kc, Sh.-WBAL to Simul.-KRLD unltd.

WSAY, Rochester, N. Y.—Reinstate CP new station 1210 kc 100 w D.

WLW, Cincinnati — Extension exp. auth. 500 kw D, directional N.

NEW, Farnsworth Television Inc., Springfield, Pa.—CP visual amended to delete 42,500-56,000 and 60,000-86,000 kc.

KFXR, Oklahoma City—Vol. assign. license to Plaza Court Brdcstg. Co.

KPDN, Pampa, Tex.—Vol. assign. license to R. C. Hoiles.

NEW, Johnson City Brdcstg. Co., Johnson City, Tenn.—CP 1200 kc 100 w 250 w D unltd.

WRBM, Chicago—Extension exp. auth. Synchro-KFAB LS to midnight.

NEW, C. F. Gaarenstroom, Fairmont, Minn.—CP 1420 kc 100 w 250 w D unltd.

KSIM, Salem, Ore.—CP new trans.

KWK, St. Louis—Modif. CP re equip.

WHBU, Anderson, Ind.—License for CP new equip.

KXL, Portland, Ore.—Transfer control to T. W. Symons Jr., E. B. Craney.

NEW, KLZ Brdcstg. Co., Denver—CP 1210 kc 100 w 250 w D unltd.

NEW, W. E. Whitmore, Hobbs, N. M. —CP 1210 kc 100 w unltd.

APPLICATIONS RETURNED—NEW, Myrl E. Jones, Carter Lake, Neb.; NEW, Brunswick Radio Broadcast Station, Brunswick, Ga.

JUNE 17

WTBO, Cumberland, Md.—Modif. license from D to unltd. 250 w.

WMEX, Boston—Amended re trans. site.

WGR, Buffalo—CP new trans., antenna, increase 1 kw to 1 kw N 5 kw D.

WABY, Albany, N. Y.—CP new trans., antenna, increase 100 w to 100 w 250 w D, move trans., studio locally.

WWSW, Pittsburgh — License for CP change equip., move trans.

NEW, C. W. Snider, Wichita Falls, Tex. —CP 1500 kc 100 w unltd. amended to 100 w 250 w D.

NEW, Isadore Goldwasser, Anniston, Ala.—CP 1420 kc unltd. 100 w, amended to D only.

KRGV, Weslaco, Tex.—CP change equip., new antenna, increase 500 w to 1 kw.

WIS, Columbia, S. C. — License for CP move trans., change freq., increase power.

WPTF, Raleigh, N. C.—Exp. auth. 5 kw spec. directional.

KIRO, Seattle—Extension exp. auth. 710 kc 1 kw unltd.

KFEL, Denver—Modif. CP change equip., move trans. locally.

KFWB, Hollywood — Modif. CP new equip., increase power, to change antenna and equip., move trans. to Moynier Lane & Higuera Road, Hollywood.

APPLICATIONS RETURNED — NEW, Pee Dee Radio Assn., Mullins, S. C.; NEW, Western Broadcasters Inc., Hobbs, N. M.; C. F. Gaarenstrom, Fairmont, Minn.; WGBF, Evansville, Ind.

JUNE 18

WCAD, Canton, N. Y.—Vol. assign. license to Brockway Co.

W4XBW, Chattanooga—License for CP gen. exp.

WCAT, Rapid City, S. D.—CP vertical antenna, move trans., studio 600 feet.

KANS, Wichita—Modif. CP new station, change equip., site.

KIDO, Boise, Id.—CP new trans., vert. antenna, move trans. locally.

NEW, Loyal K. King, Los Angeles—CP 1530 kc 1 kw unltd.

APPLICATION RETURNED — NEW, George F. Warren, Clifford A. McLin, Traverse City, Mich., CP 830 kc 500 w D.

JUNE 19

NEW, Albert O. Fenyvessy, Rochester, N. Y.—CP 1210 kc 100 w D, amended to ask facilities WSAY.

NEW, WRBC Inc., Cleveland—CP 950 kc 1 kw unltd., amended to directional antenna.

KFRU, Columbia, Mo.—Auth. transfer control to Star Times Pub. Co.

KFAB, Lincoln, Neb.—Extension exp. auth. synchro.—WBBM.

NEW, Frank F. Airey, Twisp, Wash.—CP 1220 kc 250 w D.

APPLICATIONS RETURNED — NEW, Amarillo Brdcstg. Co.; NEW, E. Gibbs, Las Vegas, N. M.

JUNE 22

WEEI, Boston — CP new trans., directional antenna, increase 1 kw to 1 kw 5 kw D, move trans. to Medford.

WBAL, Baltimore—Extension exp. auth. change from Sh.-WTIC to Simul.-KTHS spec. hours 1060 kc and Synchro.-WJZ 760 kc directional.

NEW, A. Frank Katzentine, Miami Beach, Fla.—CP 1500 kc 100 w unltd.

WDAH, El Paso—CP change equip., vertical antenna, move trans.

NEW, National Battery Brdcstg. Co., St. Paul—CP 580 kc 1 kw unltd.

JUNE 23

WLAP, Lexington, Ky.—Auth. transfer control to J. Lindsay Nurn.

NEW, Dixie Brdcstg. System, Stokes Gresham Jr., pres., Valdosta, Ga. — CP 1500 kc 100 w D.

NEW, John E. Fetzer, Benton Harbor, Mich.—CP 1500 kc 100 w unltd., amended to D.

WJR, Detroit—CP new equip., increase to 500 kw.

NEW, U. S. Brdcstg. Co., Toledo — CP 1200 kc 100 w D.

NEW, Same, Columbus—CP 1310 kc 100 w unltd.

KOIL, Omaha—CP change equip.

JUNE 25

WAAB, Boston—CP change WNAC trans. to reduce maximum rated carrier power to be used for WAAB when WNAC is authorized to use its new 5 kw trans.

W2XMN, New York (Edwin H. Armstrong)—Modif. CP to add 41,600 kc.

WBNO, New Orleans—Vol. assign. license to Edward R. Musso, amended to change transferee to J. E. Richards, John R. Maddox and Edward R. Musso, d/b Pelican State Brdcstg. Co.; CP new equip., vert. antenna, change hours from Sh.-WJBW to unltd., move studio & trans. locally, asks facilities WJBW.

W9XAA, Chicago—CP increase power, replace trans.

NEW, A. W. Mills, Gallup, N. M.—CP 1310 kc 100 w unltd., amended to 1500 kc.

JUNE 27

WELI, New Haven—License amended to City Brdcstg. Corp.

WCOP, Boston — License amended to Mass. Brdcstg. Corp.

WGBI, Scranton—Modif. license increase 500 w to 500 w 1 kw D.

KRLH, Midland, Tex. — Modif. license 1420 to 1210 kc.

NEW, Ernest Edward Ruehlen, Great Bend, Kan.—CP 1370 kc 100 w unltd.

NEW, C. S. Gooch, Amarillo, Tex.—CP 1500 kc 100 w D.

KGDY, Huron, S. D. — Auth. transfer control to Greater Kampeska Radio Corp.

NEW, Homer D. Banta, Burlington, Ia. —CP 1310 kc 100 w unltd.

NEW, Central States Brdcstg. Co., Council Bluffs—CP 1500 kc 100 w unltd.

WCFL, Chicago — CP new equip., increase 5 to 50 kw.

JUNE 29

WDRC, Hartford—Modif. license increase from 1 kw 5 kw D to 5 kw N & D.

WMFC, Hibbing, Minn. — CP change equip., increase from 100 w to 100 w 250 w D.

APPLICATIONS RETURNED — NEW, Vereen-Wimpy, Moultrie, Ga.; KFVD, Los Angeles; WGNY, Chester, N. Y.; WSPR, Springfield, Mass.; KFRU, Columbia, Mo.

Examiner's Report . . .

NEW, Ventura County Star Inc., Ventura, Cal.—Examiner Seward recommended (I-239) that applic. CP 1170 kc 250 w D be granted.

Westinghouse Describes Modulation Experiments

CLAIM that Westinghouse radio stations used frequency modulation transmission as early as 1928 was made in a letter to the FCC from S. D. Gregory, assistant manager of broadcasting of Westinghouse, made public June 17. Commenting on the FCC rules adopted in May setting forth frequencies in the band from 40,000 to 42,000 kc. for frequency modulation experiments of the character proposed by Maj. Edwin H. Armstrong, Mr. Gregory expressed satisfaction over the action which encourages experimentation along this line.

"In the interest of keeping your records accurate with respect to development of frequency modulation," he wrote, "we would like to bring to your attention the fact that at various times during a period of several months starting in the winter of 1926, frequency modulation was used for regular program operations at Westinghouse stations KDKA, at Pittsburgh, and KYW, in Chicago. It was also used quite extensively in the operation of international broadcast station W8XK during the same period."

ROLLING STUDIO — Central States Broadcasting System (KFAB, KOIL, KFOR) has put this new mobile unit into operation. First person interviewed was Erno Rapee, NBC orchestra leader, from Omaha airport (at left of photo), with Bob Cunningham feeding questions. With a 30-watt transmitter, the outfit has a radius of about 50 miles. It includes public address system and has a trapdoor in the top to give announcers a good view of what is happening in the neighborhood.

Lucky Strike Renews

WITH the success of the *Lucky Strike Sweepstakes* radio contest, the American Tobacco Co. has renewed, effective Aug. 1, *Your Hit Parade* on 93 CBS stations for another 13 weeks at the same time as now scheduled. This is the first renewal of this series on CBS, the initial broadcast having been heard on May 1. Lord & Thomas, New York, places the account. [See page 52 for further details of Lucky Strike program.] The sponsor announced June 25 that more than 39,000 persons had won cartons of cigarettes during the week beginning June 22.

Colgate-Palmolive-Peet And Gillette Razor Sign For CBS Song Program

GILLETTE SAFETY RAZOR Co., Boston, and Colgate-Palmolive-Peet Co., Jersey City (Palmolive soap, shaving cream), both of which signed for the CBS Sunday night sustaining community sing program within a few hours after hearing auditions, came to an agreement with CBS by deciding that each would sponsor the program on separate nights.

C-P-P will use a 67-station network for a show titled *Come On, Let's Sing*, to begin July 1, Wednesdays, 9:30-10 p. m., with Jack Arthur as master of ceremonies and Edmund Ruffner roving through the audience asking comment on current events.

Gillette, according to CBS, will use the 10-10:45 p. m. period Sundays and is considering a series of cross-country interconnected song festivals. Guest groups will be heard on the program from other cities, along with the New York audience. As a sustaining program, the *Community Sing* series drew heavy mail from all corners of the nation.

Ruthrauff & Ryan Inc., New York, is the Gillette agency. Benton & Bowles Inc., New York, has the C-P-P account.

Pittsburgh Symphony Back

RETURN of the Pittsburgh Symphony Orchestra on 45 CBS stations, starting Sept. 6, was announced June 27. The orchestra and guest stars will again be sponsored by Pittsburgh Plate Glass Co., Sundays, 2-2:45 p. m. Batten, Barton, Durstine & Osborn, New York, handles the account.

THROUGH courtesy of the NBC-Red network, something like 60 stations were hooked up the afternoon of June 20 for a "radio meeting" of WPA staff and relief employes, with Harry Hopkins speaking from Washington and others from other cities.

NBC Staff Changes On the West Coast

Mr. Carney

SEVERAL NBC Western division executive personnel promotions and changes will take place in San Francisco and Hollywood on July 1, Don E. Gilman, vice-president in charge, announced June 24.

H. J. Maxwell, who has been Gilman's assistant in San Francisco for more than two years, has resigned to devote his entire time to development of the Fresno (Cal.) Broadcasting Co., seeking a new station there. His successor at NBC is Lew S. Frost, formerly Western division program manager. Kenneth Carney, appointed production manager several months ago, has been elevated to the post of program manager. Frank Cope, for more than six years associated with KJBS, San Francisco, has been appointed NBC production manager in that city. He is a brother of Donald Cope, who held this position at NBC until he resigned some months ago to join Benton & Bowles Inc., New York.

Walter Baker, NBC office manager and purchasing agent in San Francisco, has been transferred to the Hollywood studios. He replaces Russell Garceau, NBC Hollywood office manager and auditor, who has resigned. Sydney Dorais, formerly assistant auditor in San Francisco, has taken over the post of office manager and purchasing agent vacated by Baker. A. G. Diedericks, who recently joined the San Francisco office staff, has taken on Dorais' former duties.

In the rearranging of personnel, and as part of the general economic program inaugurated by Mr. Lohr when he became NBC president some months ago, three technicians, two in San Francisco, and one in Hollywood, have been eliminated from the staff. San Francisco men affected are E. E. Jefferson, studio engineer and W. D. Kellog, KPO transmitter engineer. The Hollywood studio engineer eliminated is R. G. Denechaud. Several other changes in personnel, both in San Francisco and Hollywood, are expected to take place.

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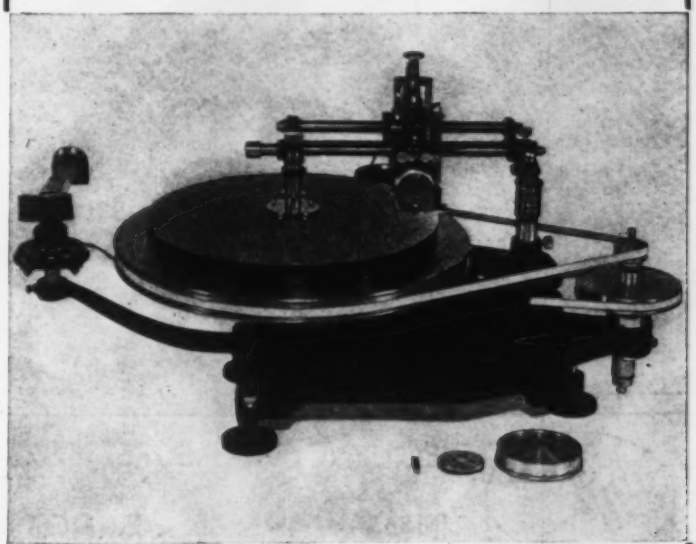

Proof of the value of the staticnary recorder lies in the immediate acceptance of it by nationally-known stations. For instance, take a typical case history from our files (this occurred last week):

For some time, station "S" has been using two Presto Portable Instantaneous Recorders in its studios constantly and successfully. Suddenly there was an influx of amateur contests on the station. A terrific demand for pre-audition service was created. Amateurs had to be interviewed from 8 o'clock in the morning to 10 at night . . . recording equipment had to operate continuously. Inquiries for new equipment went out . . . and the Presto Stationary Recorder was added to Station "S".

Continuous operation made a sturdy, heavy-duty, efficient unit a virtual necessity . . . the Presto Stationary Recorder "filled the bill." This machine cuts wax as well as acetate, is equipped with extra heavy turntable, assures an absolute constancy of speed and uniformity of performance, and is priced surprisingly low. Full details on request.

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Premium Offers of Network Sponsors Include Novel Merchandising Schemes

DIVERSE merchandise offers as well as service offers are found in premium campaigns being staged on major networks this year. Popularity of premiums continues unabated, with sponsors seeking to interest listeners, attract new audiences or promote sale of certain lines.

Premiums offered on CBS by sponsors during the first five months of 1936 follows:

American Tobacco Co. (Lucky Strike), picking first three ranking songs to be played on next program, all winners receiving a carton of Lucky Strikes (May).

Acme White Lead & Color Works (paint), 25-word letter telling "Why You Like Lin-x", plus sales slip or tag from can of Lin-x. Weekly prizes; first, Ford coach; second, $100; next 20, $5 (Feb., March, April).

Atlantic Refining Co. (petroleum products) a free offer of a copy of Boake Carter's Story of Toms River (Feb., March).

Carborundum Co. (abrasives), pocket size Carborundum sharpening stone for box top or label from any Carborundum product (Jan., Feb.); a free offer of booklet, Romance of Carborundum (Jan.); to the ten oldest couples dancing to the music of "Blue Danube" on program, pictures of Niagara Falls (Feb.).

Colgate - Palmolive - Peet Co. (Palmolive soap), complexion brush for 10 cents and black bands from three bars of Palmolive soap. (Jan., Feb., March); short letter beginning with the words, "I like Palmolive soap because—" plus black bands from three bars of Palmolive soap and name and address of dealer and clerk selling the soap. First 20 winners received $1,000 or a free trip to Europe on the *Queen Mary*, next 100,000, complexion brushes (March, April, May).

Colgate-Palmolive-Peet Co. (dental powder), $1,000 first prize; $250 second, next 25—$10, for short letter on "What I Would Do With $1,000" (March, April).

Colgate - Palmolive - Peet Co. (Peet's Granulated), weekly cash prize contest on short letter beginning with the words, "I Prefer Peet's Granulated Soap because—" with box top of product. Prizes $100 first; next 50, $5 in trade at grocery (March, April, May).

Colgate - Palmolive - Peet Co. (shaving cream) $1,000 first prize; second $250; third $50; next 25, $10; next 50, $5 for box top from Palmolive shaving cream and a short letter on, "Why Crime Does Not Pay" (March, April).

Consolidated Cigar Co. (Harvester cigar), picture of Harv & Esther, members of cast, and copy of theme song for 2 Harvester cigar bands (Jan.).

Continental Baking Co. (Wonder bread), free map of the Wonder Valley of Gold and a booklet "Around the Campfire" (April, May).

Cream of Wheat Corp. (cereal), membership in Buck Roger's Solar Scouts club, including scout badge and secret handbook, for the triangle from a package of Cream of Wheat (Jan., March, April, May). Buck Roger's equipment to members of Solar Scouts club for green triangles from Cream of Wheat (Feb., March).

Delaware & Lackawanna Coal Co. (Blue coal), free tickets for studio broadcast (Feb.).

E. I. DuPont de Nemours & Co. Inc. (institutional), copy of Declaration of Independence to teachers and instructors who furnish the name of school and class taught (Jan.); another manuscript offer, "Abraham Lincoln, A True American", same requirements (Feb.); free offer of "Kinship of DuPont Products" and 13-color chemical color chart (April). Sample of rug anchor (April).

Ford Motor Co., free copy of weekly radio talks by Mr. Cameron (Jan. through May).

Ford Motor Co. (Lincoln Zephyr), free booklet describing the Lincoln Zephyr (March, April).

Great Atlantic & Pacific Tea Co., (A & P coffee) tickets for basketball game between Celtics and Collegiates for $1.50 and .75c (April).

General Mills Inc. (Wheaties), a word-building contest using only standard English three-letter words formed from the letters in the sentence "Wheaties keep you as warm as a cooked cereal" accompanied with sales slip for box of Wheaties. Prizes: First, Lincoln Zephyr and $100 to a boy and a girl; next 25, a $7.50 Parker fountain pen with engraved name for boys and girls (Jan., Feb.).

Hecker H-O Co. Inc. (H-O oatmeal and Force), membership, code book and rules of Rangers for 2 box tops from either of above products (Jan. Feb.).

H. J. Heinz Co. (canned foods), free offer of hostess bulletin (Jan. through April); Heinz book of meat cookery for 10 cents (Jan., Feb., March); baby diet book for 10 cents or 3 labels from any Heinz strained baby foods (Jan., Feb.); free offer Heinz entertaining guide (Jan.); book of salad recipes for 10 cents (Jan.); free offer meatless dinner menus (Jan., and March); free offer mid-winter desserts (Feb.); free offer hospitality shelf bulletin (Feb.); free offer children's recipes and menus plus vitamin and mineral chart (Feb.); free offer of menus for entire family (March); free offer German menu bulletin.

Illinois Meat Co. (meat products), Mix-masters, Elgin watches, hosiery, candy, Health-O-Meter scales, blankets, radios, Toastmasters, etc. for one label from a can of Broadcast Corned Beef Hash and a letter rhymed on the program (Jan.); for statement in 20 words or less on "Why You Like Broadcast Corned Beef Hash" and letter to be rhymed on the program, both written on back of a Broadcast label, a daily contest which awarded, first, Elgin watch; second, Mixmaster; third, Silex coffee maker (Jan.); contest similar to above for Broadcast spaghetti meat, prizes, first, Elgin watch; second, Silex coffee maker; third, electric clock (Feb.); free offer of quick recipes (Feb.).

Kleenex Co. (Kleenex & Quest), answer to question, "Should Mary Marlin Go Back to Her Husband, Joe?" plus a receipt for a purchase of Quest; $1,000 first prize; $250 second; next 3, $50; next 25, $10; next 50, $5; next 919, 1,000 sheets of Kleenex (Feb.).

Kolynos Sales Co. Inc. (toothpaste), for best three-word name of black evening dress worn by Myrna Loy in the picture "Wife vs. Secretary" and a Kolynos carton; first prize, $1,000; second, $500; next 2, $100; next 10, $10; next 20, $5; next 100, $1 (Feb., March).

Lady Esther Co. (cosmetics), free offer of five different shades of face powder and seven-day supply of face cream (March, April).

Larned Co. (Hill's nose drops), free offer trial bottle of Hill's nose drops (March, April).

Lehn & Fink Inc. (Pebeco toothpaste), four-year college course for person submitting the best 500 word letter on, "How Can America Stay Out of War?" No proof of purchase required (Jan., Feb.); Eddie Cantor joke book for Pebeco carton (March, April, May).

Lehn & Fink Inc. (Hinds Honey & Almond cream), weekly prize, Pontiac automobile, for best 50 word letter on the subject "Why I Like and Use Hinds Honey & Almond Cream" accompanied with 2 box fronts from 10c size or 1 front from the large carton of the product (Jan., Feb., March).

Mohawk Carpet Mills Inc. (carpets and rugs), free offer of bottle of Old English Rug Sta (rug anchor) for the number of favorite Mohawk rug or carpet (March, April); free offer of interior decoration booklet (May).

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STATION WOR, hereinafter referred to as "the Station," promises to pay to the holder hereof the Bonus Coverage delivered by the Station as indicated on the map reproduced on the reverse side. Said Bonus includes coverage of the Atlantic Seaboard from Maine to Maryland, as well as major portions of the remaining New England States and New York and Pennsylvania. This Bonus Coverage is the regular interest offered the holder of this certificate in addition to the Station's guaranteed coverage of the largest listening-buying market in the world. This bond shall not become valid or obligatory for any purpose until it shall have been authenticated by duly executed contract between the Station and the holder.
IN WITNESS WHEREOF the Station has caused these presents to be signed by one of its authorized officers and his signature to be affixed hereto this day of June 15th, 1936.
STATION WOR
Sales Manager

FACSIMILE BOND — WOR, Newark, on June 15 sent to 3,000 agencies and advertising representatives a "bond" promising to pay bonus coverage in its market. The stunt tied in with issuance of bonus bonds.

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EQUIPMENT

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CABLE: JENKADAIR

National Ice Adv. Inc. (ice manufacturers), answers all questions re ice refrigeration (March, April).

Pet Milk Sales Corp. (canned milk), can openers for Pet milk label (Jan. through May); recipes for 2, 4, 6 persons for 1 Pet milk label (Jan. through April); baby book for 1 Pet milk label (Jan. through May); candy book for 1 Pet milk label (Jan. through May); cook book for 1 Pet milk label (Feb.); Lenten recipes, free offer (Feb.); Swedish and tomato salad dressing recipes, free offer (April); "Good Things to Eat" for 1 Pet label (May); free offer of sauce recipes (May); free offer of recipes for drinks (March); free offer salad dressing recipes (March); vegetable recipes for 1 Pet milk label (March); Easter cake recipes for 1 Pet milk label (March).

Philco Radio & Television Corp. (radio receivers), free copy of Boake Carter broadcast on the death of King George V (Jan.).

Pillsbury Flour Mills Co. (flour), free offer of recipes used on broadcasts (Feb.).

Plymouth Motor Co. (motor cars), Plymouth sedan, weekly prize for best answer submitted to question asked by Ed Wynn. Official entry blanks at Plymouth, De Soto or Dodge dealers (Feb. through May).

Pompeian Co. (cosmetics), large tube of Pompeian tissue cream for 10c (Jan.); large tube of Pompeian cleansing cream for 10c (Jan., Feb.); autographed photograph of Gary Cooper, star of show, for inside paper cover of new Pompeian product (Jan.); new Pompeian cleansing cream for paper cover from Pompeian powder (Jan.); new Pompeian massage cream for 10c (Jan.); new Pompeian lipstick, of desired shade, for 25c (Feb.); special get-acquainted box of new Pompeian powder, of desired shade, for 10c (Feb., March); 100 first prize; next 100, two pairs of Gotham Gold Stripe hose, for best letter on "Why I Like the New Pompeian Beauty Powder", entries accompanied by inside paper of Pompeian beauty powder and to all entries a Pompeian lipstick in case (March, April).

Remington Rand Inc. (typewriters), prize contest for best 50-word statement on "Why I want a Remington Noiseless Typewriter" plus information whether entrant owns, rents, or operates typewriter, if so, make and model number, $1,000 first prize, $500 second, $250 third, next 5, $100; next 50, $10, next 150, $5; next 200, typewriter desks; next 592, boxes of ribbon and carbon paper (Jan.); a contest with same requirements as above for 30-word statement on "Why I Object to Old-Fashioned Noisy Typewriters", prizes, $1,000 first; next 50, Remington noiseless portable typewriters (Jan.); typewriter ribbon and package of carbon paper for 25c and make and model number of listener's typewriter (Jan., Feb., March), March offer asked for 35c; ten-day free trial of Remington typewriter, additional three weeks rental for $2 (Jan., Feb., March); combination offer of Remington portable, typewriter desk, instruction book and carrying case for $38.50 (Feb.); ten-day free trial of above offer (Feb.); opportunity to sell Remington typewriters on commission basis, must furnish name, address, age (Feb.); copy of book, "You Can Write" for 25c and make and model of typewriter if owned (Feb., March); children's combination offer of junior portable, carrying case, instruction book, typewrite desk, and copy of "You Can Write" for $38.75 (Feb.); free trial of line-a-time (Feb.); combination offer of typewriter, typewriter desk, carrying case, instruction book, copy of "You Can Write", package of carbon paper for $1.50 plus cost of typewriter (Feb.); combination offer of junior portable typewriter, carrying case, instruction book and portolight for $37.95 (Feb.); typewriter desk and certificate good for $1 toward down payment on typewriter for $2 (Feb.); personal correspondence offer of portable typewriter, carrying case, instruction book, package of carbon paper, 2 quires bond stationery with name and address imprinted, plus booklet by Emily Post, details from Remington dealer (March); copy of "How to Sell What You Write", package of carbon paper for 25c make and model number of typewriter if owner (March); typewriter desk, 2 quires of vellum stationery with name and address imprinted, booklet by Emily Post, certificate good for $1 toward typewriter for $3 (March); 20 typewriting shortcuts and 10-day free trial of Remington short stroke typewriter (March); two quires of stationery with name and address imprinted, Emily Post booklet, package of carbon paper for $1 and make and model of typewriter owned (March); free offer of Remington Rand bargain book and picture of the *March of Time* radio cast in action (March).

Sales Affiliates Inc. (Zotos permanent wave), free offer of courtesy card for test Zotos curl and list of shops in neighborhood (Feb. through May); Zotos permanent waves for 25 best 100-word letters on "Why Machineless Wave Is Best" (May).

Sterling Products Inc. (Bayer aspirin), free offer of broadcast tickets (Jan.).

Stewart Warner Corp. (Alemite), Alemite Brigadiers Club safety emblem for license plate and book of safety tips, free offer (March, April, May).

Swift & Co. (Sunbrite cleanser), membership in Sunbrite junior nurse corps, scroll, copy official creed, pictures illustrating salute, photo of Dorothy Hart for 3 Sunbrite labels (Feb. through April); all members receive autographed photo of Dorothy Hart and Timothy Blye, of radio cast, in full uniform (March); magic nurse's chart, package of Bauer & Black Handi-snip bandages, junior nurse corps badge for 3 Sunbrite labels (March through April); prize contest for mothers, 100-word letters beginning, "In the future Sunbrite programs, I would like my daughter to hear about . . . (some famous women, etc.)" plus 1 Sunbrite label, 20 junior radio sets, all contestants receiving picture of entire cast (April).

Ward Baking Co. (bread), membership in Scoop Ward Press Club including reporter badge, free offer. (Jan. through May); ten self-focusing cameras each week for ten best stories submitted by Scoop Ward Reporters (Jan., Feb., March); similar contest with $49.50 Underwood typewriters as prizes (March, April, May).

Wasey Products Inc. (Barbasol), safety razor, package of 5 blades for 30c and carton from 50c size of Barbasol (Jan. through April).

Wasey Products Inc. (Kreml, Musterole, Zemo), autographed copy "Making Molehills of Mountains" by Voice of Experience (M. Sayle Taylor) for $1.50 (Jan.); for five best letters re how to wake a husband in the morning, copies of "Making Molehills of Mountains" (March).

First Fr. Coughlin Interview

HERE is the first personal radio interview ever given by Father Charles E. Coughlin, militant Detroit priest. He is being interviewed by Linus Travers (right), Yankee director of commercial productions. John Shepard 3d, Yankee president, is behind the microphone. Father Coughlin is said to be negotiating for a special network during the political campaign.

Some NBC Premiums

HERE is a partial list of premiums offered on recent NBC programs:

Wander Co. offered listeners to Little Orphan Annie 8 decalcomania transfers, consisting of people who were out West on the Flying W Ranch, in return for the aluminum seal from a can of Ovaltine sent to the client, Chicago.

Princess Pat Ltd., offered a full-size box of face powder in return for the printed paper circle from a box of Princess Pat Rouge sent to the sponsor, Chicago.

Sun Oil Co. is offering an improved individual monogramed emblem for use on license plates. The new emblem is equipped with a reflector which acts as an extra tail light at night. Sunoco dealers supply them for 10c each.

Ford Dealers offer to lend truck owners a new Ford V-8 truck for an "on the job" test in order to permit truck owners to drive the Ford V-8 with their own load over regular routes for checking the results. Any Ford Dealer will arrange for the test.

Pillsbury Flour Mills Co., which recently changed from one NBC network to another, offered a synopsis of the Today's Children plot in order to enable new listeners to become acquainted with the story.

Listeners to the Esso News Reporter are invited to get a Touring Service Card at any Esso dealer. Filled in and returned to the Standard Oil Co. of New Jersey, it brings maps and full information to the sender.

Great Atlantic & Pacific Tea Co. offered a special issue of the A & P Menu devoted to the planning of picnic menus with recipes, free at all A & P stores.

A booklet, "Seven Wise Men", was offered free by the Occidental Life Insurance Co.

Tastyeast Inc., offered an autographed photograph of Lefty Gomez in return for three inside wrappers from Tastyeast bars; sent to the sponsor, Trenton, N. J.

Boweys Inc. offered in return for the cardboard cap from any milk bottle, together with listener's name and address, a Magic Slate.

Standard Brands Inc., offered listeners to One Man's Family (on the Pacific Coast) a copy of Jack Barbour's scrapbook in return for the end card from a Tender Leaf Tea package.

WEVD, New York, presented interviews with five Progressive Senators during the Democratic Convention, with Bryce Oliver questioning them on current issues.

BROWN, ANTHONY Co., Boston investment house, is using 26 five-minute programs on WCOP, Boston, with a morning studio talk by Bradford Dorr, banking author.

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Now You Be The Judge

100% shadowgraphed Needles

Your transcriptions are at their best with the best needles.

Eliminate surface noise by using needles made to fit the requirements.

STEEL CUTTING NEEDLES FOR ACETATE.

Playback Needles for all Transcriptions.

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W. H. BAGSHAW CO.
Lowell, Mass.

Dist. by
H. W. ACTON CO.
370 7th Ave.
New York City

Send for Samples

NAB Conventioneers . . .

Universal's new professional RECORDING MACHINE, DISCS and ACCESSORIES and MICROPHONES will be DEMONSTRATED by staff engineers at The Stevens during the NAB Convention.

See

Dr. Ralph L. Power, advertising manager of Universal, at The Stevens.

Or

L. G. Cushing, Chicago representative, room 513, 540 No. Michigan Ave., 'phone Delaware 1561

UNIVERSAL MICROPHONE CO., Ltd.

424 Warren Lane — Inglewood, Cal.

MR. E. H. RIETZKE — PRESIDENT, CREI

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Most CREI students and graduates are men who are, and have for years, been professionally engaged in Radio. They are men who are ambitious enough to study while they work . . . men who are qualifying themselves for the most important jobs you have to offer.

• We know all about their ability . . . their training . . . their past experience. We believe we have just the man you are looking for . . . and charge nothing for getting you together. Our reward is derived from the satisfaction of seeing GOOD MEN find GOOD JOBS in any of the following phases of Radio Engineering:

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IN THE CONTROL ROOM

A. J. COAR, owner and manager of the U. S. Recording Co., Washington, has completed work on studios of WNOX, Knoxville, and will also act as engineering consultant in the installation of the new transmitter of WCPO, Cincinnati, starting July 1. Mr. Coar formerly was with RKO in Hollywood as sound engineer and with Piezoelectric Laboratories, New York.

GLENN D. GILLETT, Washington consulting engineer, has returned to his office following an operation for appendicitis.

JOHN BUTTRICK, operator of WEEI, Boston, was married in June to Miss Betsey Green, of that city. Norman Young, operator, was married to Miss Lavinia Ballard, of Birmingham, Ala.

BIRDSALL HOLLEY, of the technical staff of WHAM, Rochester, has been elected president of the Rochester Camera Club.

MAX KELCH, formerly an instructor at the California Institute of Technology and later engineer at KMPC, Beverly Hills, Cal., in June became an engineer for the Southern California network.

MAX WEINER, chief engineer of WNEW, Newark, for no particular reason picked the 16,762d hour of WNEW broadcasting as the occasion for a party to his staff.

Mayor's Fireside

"FIRESIDE talks" to his constituency, somewhat along the lines of President Roosevelt's notable chats to the nation, have been started on a weekly basis over WIP, Philadelphia, by Mayor S. Davis Wilson. The series is non-political in character, and Mayor Wilson plans to bring his various department heads before the microphone to introduce them to the people.

GABRIEL KRON, General Electric Co. engineer, on June 20 was awarded an honorary master of engineering degree by the University of Michigan.

THOMAS J. DOONAN, formerly of KSO-KRNT, Des Moines, Ia., has joined the technical staff of WHO, the Central Broadcasting Co. station in that city.

HOMER COCHENE, formerly in charge of the transmitter of WENR, Chicago, has joined the engineering staff of WLS, Chicago.

JAMES M. MORAN has been promoted to chief engineer of KTHS, Hot Springs, Ark., replacing Moody McDonald, who has joined the technical staff of WLW, Cincinnati. New additions to the KTHS staff are John Thornton and V. O. Van Dusen.

WHO IS YOUNGEST?
WIL, WBNX Feature Youthful Microphone Voices

Geo. Wood Jr.

WHO is radio's youngest commercial announcer?

Two adolescent microphone artists are George Wood Jr., of WIL, St. Louis, aged 12, and Donald Dike, of WBNX, New York.

Young Wood has been on the air five years as singer, announcer and master of ceremonies and has had his own commercial program for three of them. He is the son of George Wood, pioneer radio production man and announcer. Recently he completed a 36-week series for a St. Louis furniture store and has handled national accounts for Kellogg's, Walgreen and Wurlitzer and a number of local advertisers. He comes from Bob Burn's Van Buren, Ark.

Donald Dike has an adult voice. He handles the WBNX Saturday afternoon Children's Theatre program and is a student at Columbia Preparatory School.

EQUIPMENT

WHK, Cleveland, has broken gro... for a new radiating system, w... structural steel work scheduled ... start July 1. The antenna will ... 300 feet high with wheel cap 30 ... in diameter. It was designed by WH... engineers, under direction of Edw... L. Gove, technical supervisor. T... antenna will be of the "loaded" ty... affording a maximum of low-an... radiation.

IN LINE with the expansion progra... planned by the Cornell-Dubilier Cor... New York, Leon L. Adelman, sa... manager, announces appointment ... R. W. Mitscher as sales represent... tive for the state of New York, w... the exception of New York Ci... Mr. Mitscher previously was connec... with the Tobe Deutchmann sales st...

RAY LYON, research engineer ... WOR, Newark, has designed a micr... phone for remote use. They are ta... style and combine beautly and utili... being less bulky and much easier t... handle.

COURSES in fingerprinting ar... given by Institute of Applied Science, Chicago, in a three-weekly five-minute WBS transcription series on WJR, Detroit. Mat... teson - Fogarty - Jordan Co., Chi... cago, is agency.

CLASSIFIED ADVERTISEMENTS

Classified advertisements in BROADCASTING cost 7c per word for each insertion. Cash must accompany order. When inserting advertising over a box number, count 3 words (21c) for the address. Forms close 25th and 10th of month preceding issues.

Help Wanted

Radio Salesmen Wanted!

Excellent opportunity for salesman experienced in selling small independent station time. Opening in city where business and living conditions are most desirable. Our business is finer than ever before and we want another good experienced man to make it even greater. Unusual chance for right person. No transients accepted. Give full details in first letter. Address Box 506, BROADCASTING. Our employees know of this advertisement.

Experienced announcers, artists, continuity writers, engineers, salesmen, program and production personnel are invited to register with NATIONAL RADIO DEPARTMENT, Vocational Bureau, Cleveland, Ohio. Moderate fees when placed. Several positions now open to be filled immediately.

WANTED: Continuity writer with original ideas, ability to put them into words, originality without temperament, versatility and productivity. Write giving full qualifications, KLZ, Denver, Colorado.

Situations Wanted

Cleveland trained announcer and continuity writer wishes added experience in small station. Any location. Salary secondary. Box 510, BROADCASTING.

New Station Applicants! The arrival of that license is the starting gun for the organizing of a complex new business. A successful manager who knows every detail from experience can apply tested policies and make a net profit immediately. Am now operating station but available for position with future. Box 512, BROADCASTING.

Stations requiring experienced professional studio personnel, engineers, salesmen and artists communicate with NATIONAL RADIO DEPARTMENT, Vocational Bureau, Cleveland, Ohio.

Salesman now employed but available. Not promoter type but specialist in selling for long-time satisfaction. Box 513, BROADCASTING.

Wanted to Buy

Will purchase or lease local station. Write full particulars. Box 509, BROADCASTING.

Wanted to Buy

Responsible party with cash is interested in purchasing a radio station that has possibilities. Box 511, BROADCASTING.

For Rent—Equipment

Approved equipment. RCA TMV-7... field strength measuring unit (new)... direct reading; Astiline Angus Automa... Recorder for fading on distant stations... GR radio frequency bridge; radio oscil... tors, etc. Reasonable rental. Allied Re... search Laboratories, 260 East 161st Stree... New York City.

For Sale—Equipment

Western Electric 304-A, one kilowa... transmitter, complete with one set of tubes... and partial set of spare tubes; also spare... 700-A oscillator. Fully AC operated. Guaranteed in first class mechanical and electrical condition. Equipment removed from service because of increased power. Crated, ready for immediate delivery. Original cost $18,000. Offered at $7,000 f.o.b., Columbia, S. C.

FCC memo 243 lists the 304-A equipment "as satisfying the requirements of good engineering practice" promulgated in accordance with Rule 132.

G. Richard Shafto, Station WIS, Columbia, S. C.

Western Electric 1 Kw 106-B Transmitter

This equipment is in excellent operating condition, having been taken out of service only because of an increase in power. Supplied complete, with two sets of tubes, spare parts and duplicate sets of motor generators and pumps. Designed for operation from 220 Volt DC supply, but can be easily modified for AC operation.

The transmitter is available immediately and can be inspected at any time. Correspondence is invited from anyone interested in securing this equipment at an unusually attractive price. Box 507, BROADCASTING.

SURPLUS WESTERN ELECTRIC equipment, perfect condition, from network key stations. 1B rectifiers; wonderful buy. Original cost $1400. Sell $89.95. Amplifiers 8A $37.50. 8B $59.95. 17B $39.95. 18 B $22.50. Volume Indicator 203C $25. Also assorted studio and transmitter components. High fidelity line equalization equipment. F.O.B. New York; 25% with C.O.D. A. Hass, Station WARD, 427 Fulton St., Brooklyn, N. Y.

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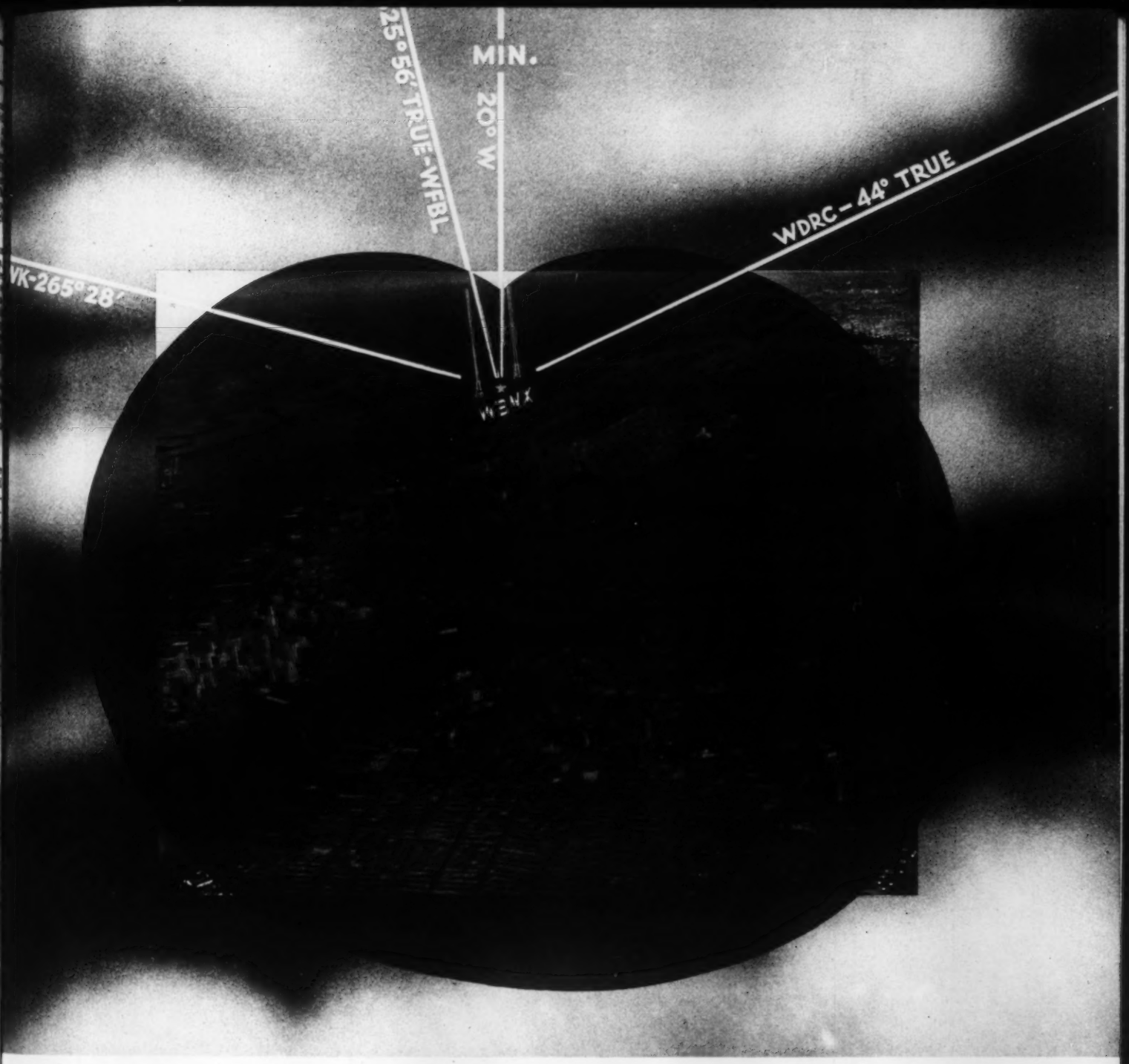

Theoretical Pattern

McLaughlin Aerial Surveys

BY PROTECTING stations on the same and adjacent frequencies, WBNX in New York City covers its most densely settled service area with a four-fold increase in power. *This is made possible only through the application of modern methods of radio engineering.*

WITH THE USE of a Directional Antenna, properly designed and located, you can concentrate your signal into any given service area, thereby increasing your milivolt strength in centers of population and at the same time materially reducing interference.

We invite your inquiries on interference, antennas, field strength surveys, or any phase of radio engineering.

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